

id
I will work hard, hope
live up to the best that is in me.
I will blot out of my life the
failures that come through wast-
ed hours, and write into it the
achievements that come through
time well spent.





HARLAN FISKE STONE

Late jurist and scholar, known during his twenty-one years on the Supreme Court bench as a "big, powerful man of genial aspect and utter simplicity," he became Chief Justice of the United States in 1941, serving until his death in 1946. He was once Dean of the Columbia University Law School. One of his strongest beliefs was that "law cannot rise above its source in the customs, morals, and social experiences of the people to whom it is applied."

Courtesy of Aome Photo

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Grateful acknowledgment is made of the valuable service rendered by the many manufacturers and specialists in office and factory methods, whose cooperation has made it possible to include in these volumes suitable illustrations of the latest equipment for office use. Acknowledgment is also made to those financial, mercantile, and manufacturing concerns who have supplied illustrations of offices, factories, and shops, typical of the commercial and industrial life of America.

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FOREWORD

MODERN business places a high premium on the trained man. Of the thousands who knock each year at the portals of our commercial enterprises, the applicant with a backlog of sound training is in greatest demand.

On the job, he has a better chance for promotion than the untrained worker, because his preparation gives him a knowledge of the broad fundamentals of successful business operation.

The road to executive leadership and success in business begins with good training. All commercial and business enterprises, large and small, are governed by certain basic principles. Today's businessman must analyze his problems with intelligence and knowledge, based on an intimate understanding of these fundamentals. He must have a grasp of the whole operation of a business as well as the inter-relation of its parts.

How does he come into possession of such knowledge? Eventually by experience, yes. But he seldom gets the chance to acquire that experience without previous preparation. Such preparation can come either through study or apprenticeship, but usually it is a combination of both.

However, the great growth of business and industry, reaching new heights of expansion during World War II, has made for further specialization in the duties of business executives and subordinates. Thus it has become impossible to get apprentice experience in the numerous departments of an organization without spending long years.

Modern methods of business training have evolved sound and tested short cuts to executive leadership and business independence. A carefully planned program of study offers effective means of acquiring such training.

In the past, the man who desired to acquire this knowledge found himself wasting valuable time. For one thing, good reading material was so scattered that blind selection of textbooks was unavoidable. As a result, much duplication of

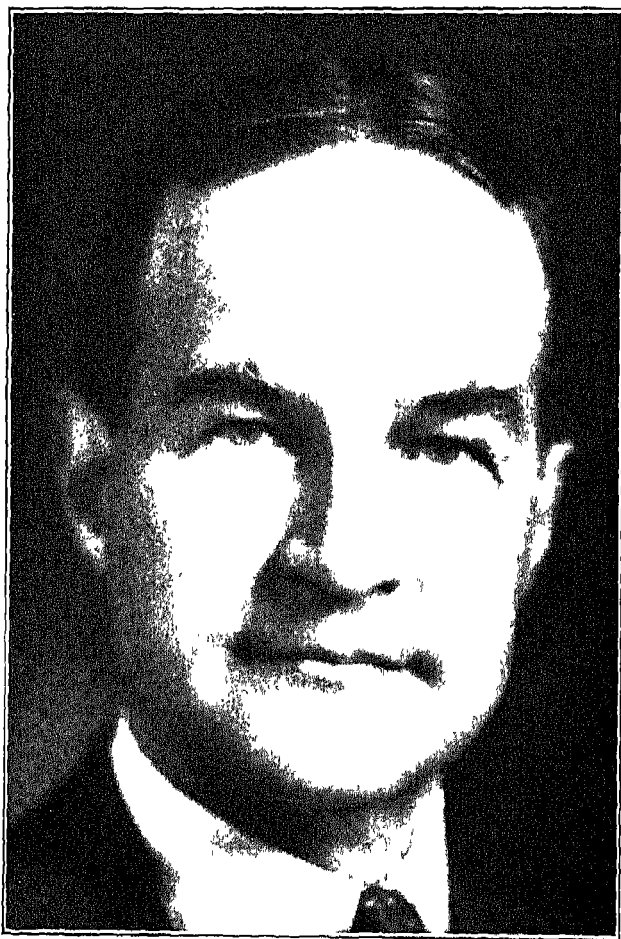
reading and important omissions gave him too much of some subjects and too little of others.

In order to offer in co-ordinated, organized form, a complete series on training for business leadership, the American Technical Society prepared this set on Practical Business Administration. Through eight editions and numerous re-printings, we have revised and added to the original texts to meet the specific needs of today's business trainee and executive.

The present set combines the collective judgment of outstanding authorities with their accumulated years of practical experience in specialized fields. Thousands already have found this set to be their first step toward successful business careers.

Prepared primarily for those who engage in independent home study, these books have been written at the college level for high-school graduates who aspire to executive positions. The style of writing is simple and readable; the lesson contents clear and comprehensive.

The businessman hard pressed for time, the fact-seeking citizen wanting the know-how of business, and the student for whom this set has been prepared primarily—all find in these books a wide range of practical knowledge and a wealth of factual material about the world of business.



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Courtesy of Acme Photo

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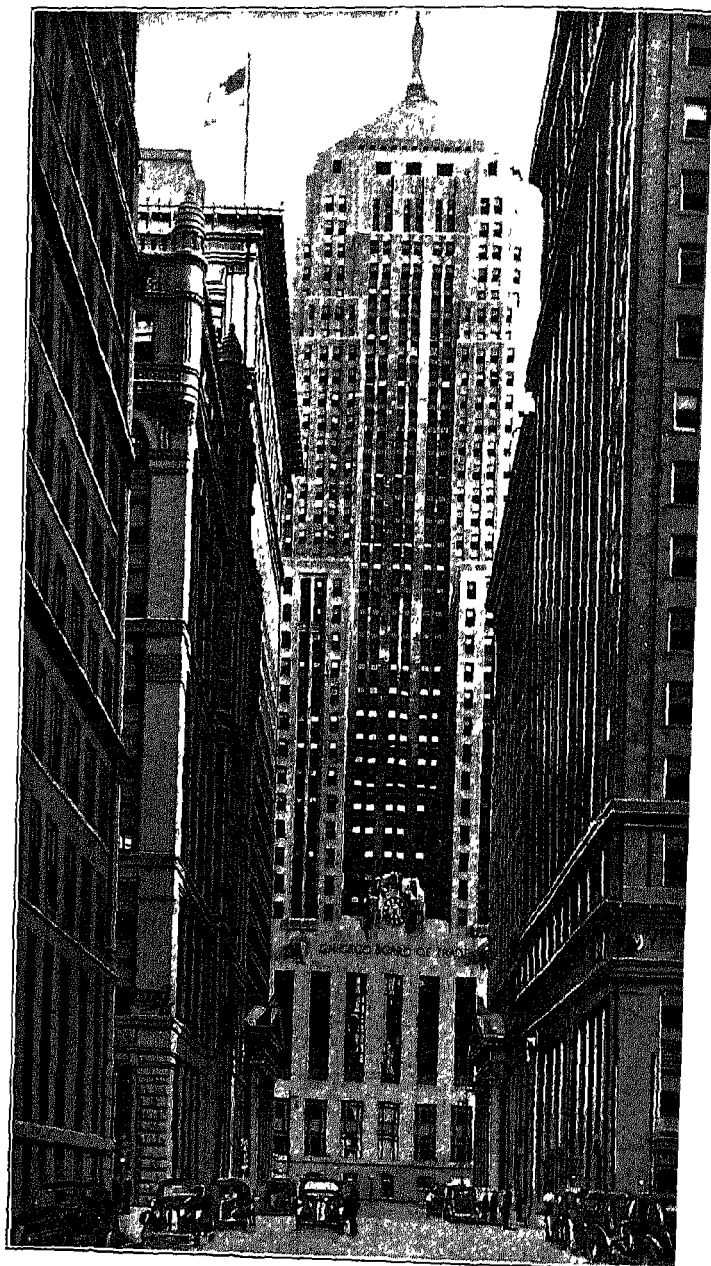
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Chicago's financial district, LaSalle Street, with the Board of Trade Building in the background. Voluminous bookkeeping records are necessary to evidence the daily transactions of these institutions.

COST ACCOUNTING

CHAPTER I

NATURE AND SCOPE OF COST ACCOUNTING

Cost accounting, as such, cannot be set apart as though it were distinct from all other phases of accounting and administration: it is too closely related to planning or production control—the organization, routines, and procedures that control the routing, scheduling, despatching, etc., of the product as it goes through the factory operations; it is also related to general, financial, or commercial accounting (different terms for the same work), which includes the general financial control records of the business or industrial enterprise. Where does cost accounting, as such, begin and where does it end? The next few paragraphs will attempt to answer this question indirectly.

First, it may be stated that cost accounting, as the term is used here, may be divided into two major parts, namely, (a) production cost accounting, and (b) selling cost accounting, or in other words, the determination of the *cost to make* and the *cost to sell*.

Production cost accounting, the cost to make, may be described in more standard terminology as “industrial cost accounting,” if the term is properly interpreted. This branch of accounting has received much attention and is widely applied. For many years manufacturers have realized that without a knowledge of the “cost to make” for each product, they are in a very poor position in a competitive market. Millions of dollars are spent annually by manufacturers for information on the cost to make. But what is this information, what makes it so valuable, and how is it collected? The major part of this discussion will be given over to answering these important questions.

Selling cost accounting, the cost to sell, on the other hand, is concerned with the costs arising *after* the product is manufactured and when it is ready for the market. Less attention has been given to this phase of the subject, partly due to the many difficulties involved;

but with the ever increasing emphasis on marketing, some attempts have been made to analyze very completely the selling and administrative costs and to apportion them properly among the various products of the enterprise.

Cost accounting, therefore, includes the determination and apportionment of *all* items of manufacturing, selling, and administration expense and all other values entering into a product during the process of manufacture and sale. Cost accounting differs from general accounting (so called) in that it secures information in much greater detail, especially with respect to manufacturing operations, and attempts to apportion costs equitably among departments and among different products.

Administrative Uses of Cost Accounting. There are two principal reasons for the increased use of cost accounting, especially in connection with manufacturing operations: first, because of the growth of industrial enterprises the average size of the manufacturing unit has been greatly increased; second, the improvements in technology and the expansion of the markets have greatly increased the complexity of manufacturing processes and methods. Increased factory space, a larger number of workers, a greater variety of operations and types of product—all of these changes have greatly increased the problems of industrial management and have rendered impossible the type of personal supervision which was in vogue during the early development of the modern factory system. More dependence must be placed on reports prepared by subordinates, and it is improbable that these reports will be very valuable for managerial purposes unless they contain accurate and comparable information which is based on accurate detailed records of the manufacturing and selling operations.

During the first phase of the period known as the Industrial Revolution, up to about 1850, the demand for various manufactured products increased so rapidly that goods could not be produced fast enough. Hence little attention was paid to cost and all energies were bent toward increasing production. About 1850 production "caught up" with the market, and since that time competition among producers has ever been increasing. With rising costs of production and narrowing margins of profit, it has become essential that manufacturers know and control their costs in order that their products

may be sold in a competitive market and still leave a margin of profit for the producer. This necessity has brought to the attention of management the great importance of accurate records and better accounting methods. Detailed records of comparative costs of different production methods and of different products have become especially necessary for managerial control purposes.

Cost Accounting Is for Control Purposes. It should be emphasized that the purpose of cost accounting is for the *control* of business operations rather than merely to secure information about what has happened. Cost accounting must be used as a guide to future operations—as an interpreter of facts and conditions. An accurate knowledge of costs, when classified by departments, by classes of expense, and by products, furnishes guidance to those who are responsible for the intelligent expenditure of capital resources, so that the business may grow and prosper. Cost accounting may fulfill the above stated objective by assisting in the control of production, by aiding in the formulation of selling policies, and by giving to the management at regular intervals (and promptly) such information as will enable the management to judge the efficiency with which the business is being operated.

ADVANTAGES OF A COST SYSTEM

The principal advantages of a cost system for purposes of managerial control may be outlined as follows:

1. Perpetual Inventories. Without a cost system it is necessary at the end of each accounting period, before preparation of the statements, to take a physical inventory of goods on hand. In a manufacturing business this is a task which can rarely be accomplished with any great degree of accuracy. A cost system provides for perpetual book inventories both in total and in detail, and these may be used in the preparation of periodic statements and reports.

2. Comparative Costs. The detailed records of an effective cost system makes it possible to prepare comparative and analytical statements setting forth such comparisons as the following:

- (a) Comparative costs and profits of different products
- (b) Comparative costs of different production methods
 - (1) Machine work with hand work
 - (2) Piece work with day work
 - (3) Overtime with regular time
 - (4) Day work or piece work with various bonus plans

- (c) Comparison of cost of specific orders, operations, or products with the corresponding costs of a previous period
- (d) Comparison of actual costs with predetermined estimates or standard costs
- (e) Comparison of production costs with those of branch factories or of other companies, or with the alternative cost of purchasing the same product from the outside

3. Establishment of Sales Policy. Within the limits set by competition, sales prices may be determined on the basis of accurate costs. If prices are entirely based on competition, then a given product must be produced at a cost below this selling price; if this is impossible, that product must be eliminated from the line unless its presence there is necessary for goodwill purposes. Correct cost information is also valuable in planning advertising and sales campaigns, because it indicates the highly profitable lines; energy may then be concentrated accordingly.

4. Control of Production Waste. Many inefficiencies may be brought to light by an accurate cost system. Idle time, wasted material, defective work, and other sources of waste are all accounted for, and there exists then a basis for the correction of these wastes.

5. Establishment of Standard Procedure. Accurate cost records of production operations provide the starting point for the standardization of procedures, of operations, of size of productive units, of material content of product, and of method of wage payment, and may make possible the centralization in a single department of planning and production control.

6. Assistance to Executives. On the basis of the reports from the cost department, it is possible for the management to decide more intelligently with respect to future financial requirements and on the formulation of general business policies. Also, individual and departmental responsibilities are more definitely located. A properly designed cost system will serve all of the purposes indicated above, and others; therefore, it becomes an effective and necessary aid to managerial control.

ACCOUNTING FOR THE COST OF GOODS SOLD

The study of accounting for a mercantile enterprise, which is a prerequisite to the effective study of cost accounting, has shown that

in a mercantile business the cost of goods sold is commonly determined by a so-called "inventory method," somewhat as follows:

Initial Inventory of Merchandise.....	\$10,000		
Purchases for Period.....	\$75,000		
Less: Purchases Returns.....	\$1,000		
Purchases Allowances.....	2,500	3,500	71,500
Freight In.....		3,000	\$84,500
Less Final Inventory of Merchandise.....			12,000
Cost of Goods Sold.....			\$72,500

This method presupposes the taking of a physical inventory at the end of the period, and the accuracy of the result depends largely on the proper counting and valuation of this inventory. The necessary computations for a manufacturing enterprise to apply this inventory method to the determination of the cost of goods sold would appear somewhat as in the table on the following page.

It is apparent that the use of the inventory method of determination of cost of goods sold requires, for a manufacturing concern, the taking of *three* physical inventories, viz., raw materials, work-in-process (partly finished goods), and finished goods. Again, the accuracy of the results depends on the proper "counting" and valuation of these inventories.

The taking of the physical inventory of raw material raises no new problem. There is available in the records the original cost of each item; it is possible to count the stock actually on hand, and thus to arrive at a valuation for the total raw materials on hand. The procedure used in a mercantile business is to a large extent applicable to this problem.

The problem of taking the physical inventories of work-in-process and finished goods does, however, introduce new problems. To the raw materials have been added quantities of labor and manufacturing expense, and the proper valuation of this inventory requires some record of the cost of each of these elements of cost as they have gone into the product. Without such cost records, the valuation of these inventories is likely to be inaccurate, and the final result—the cost of goods sold—equally so. Thus it is evident that the inventory method of determination of cost of goods sold, as used in a mercantile business, is not applicable to accounting for manufacturing opera-

COST ACCOUNTING

**How a Manufacturer May Apply the "Inventory Method"
To Determine Cost of Goods Sold**

Initial Inventory of Raw Materials.....	\$10,000		
Raw Materials Purchases.....	\$75,000		
Less: Purchases Returns.....	\$1,000		
Purchases Allowances	2,500	3,500	71,500
Freight In.....		3,000	\$84,500
Final Inventory of Raw Materials.....			<u>12,000</u>
Raw Materials Used.....			72,500
Direct Labor.....			15,000
Prime Cost.....			87,500

Manufacturing Expenses

Indirect Labor.....	\$20,000	
Supplies.....	5,000	
Rent of Factory Building....	1,000	
Depreciation of Machinery...	3,000	
Repairs.....	1,500	
Superintendence.....	7,500	
Light, Heat, and Power.....	500	
Tools Expense.....	750	
Factory Office Salaries.....	2,000	
Fire Insurance.....	1,000	
Workmen's Compensation In-		
surance.....	1,000	
Taxes.....	250	43,500
Total Cost to Manufacture.....		<u>131,000</u>
Add Initial Inventory of Work-In-Process.....		12,000
		<u>\$143,000</u>
Deduct Final Inventory of Work-In-Process.....		13,000
Total Cost of Goods Manufactured.....		<u>\$130,000</u>
Add Initial Inventory of Finished Goods.....		14,000
		<u>\$144,000</u>
Deduct Final Inventory of Finished Goods.....		12,000
Cost of Goods Sold.....		\$132,000

tions. Hence, the introduction of the additional accounting records and methods that are described as "cost accounting." In order to understand these records, which are ordinarily called a "cost accounting system," it is necessary first to become familiar with certain terms and underlying principles of the subject. These are presented in the following section.

UNDERLYING PRINCIPLES OF COST ACCOUNTING

Elements of Cost. The method used by a manufacturing concern to compute the cost of goods sold has indicated that *three* elements of cost must be considered, namely, material, labor, and manufacturing expense. Materials come to the factory in a certain form. The manufacturing operations are devoted primarily to changing that form so that the resulting product has more value than the original cost of the material plus the cost of changing its form. Thus the first element of cost is *material*. The additional elements of cost are the *labor* and the *manufacturing expense* or *overhead* involved in changing the form of the material.

Classification of Costs. Costs may be further subdivided into *direct* and *indirect* costs. This classification is based on the method by which the cost is charged to the product manufactured. *Direct Costs* are those costs which can be identified as having been incurred on account of a particular product or a production order and can therefore be charged directly to that product or that order. Any cost which cannot be so identified and charged, is known as an *Indirect Cost*. This latter class of costs includes expenses incurred on account of the general operation of the business and not for any particular order. The term "indirect" denotes that these costs must be allocated to the product by some indirect method.

This classification of costs into "direct" and "indirect" may be applied to each of the three elements of cost. *Direct Material* includes only material that can be measured and charged directly to the product or the production order in the completion of which it is used. *Indirect Material* is also used in making the product, but the manner of its use makes it impossible to charge specific quantities of it to a particular product or order. *Direct Labor* is that labor applied directly to the product in such a way that it is possible to charge it directly to the product or order. *Indirect Labor* is equally necessary,

but it is not applied directly to a specific product or order and must therefore be charged to the product by some indirect method. *Direct Expenses* are not common, as there are few expenses incurred on account of a particular order or product. Expenditures for special processing performed outside the plant may often be charged directly to a specific production order or product. *Indirect Expenses* include the great body of manufacturing expenses which are incurred in changing the form of the product, but which are of such a nature as *not* to be chargeable to a particular order or product, but must be apportioned on some indirect basis.

It is apparent that greater accuracy in costing is to be secured where the larger portion of costs can be charged as direct costs. An apportionment of costs on an indirect basis requires a large degree of estimate and approximation. It is advisable, then, in constructing a cost accounting system, to classify as direct costs every item of material, labor, and expense that can by any *efficient* method be charged directly to a production order or to a product, so long as the accounting expense involved does not outweigh the advantages of the additional accuracy secured.

The total cost of the direct labor and the direct material used in a production order or a product is frequently called the "prime cost," though this division of total cost is not an essential one.

On the basis of the above classification of costs it is possible to show in summary form the factors which make up the complete cost to make and sell a product:

Direct Material + Direct Labor = Prime Cost

Prime Cost + Manufacturing Expense or Overhead = Factory Cost

Factory Cost + Selling and Administrative Expense = Cost to Make and Sell

Cost to Make and Sell + Profit (or - Loss) = Selling Price

Distribution of Costs to Departments. The indirect costs are commonly apportioned among orders or products by way of the departments. A portion of these costs may be charged directly to departments, while other costs must be apportioned among the departments on some reasonable basis. The total departmental cost of each department is then applied to the orders or products which are manufactured in that department, by methods which will be described in subsequent pages.

A department, for cost purposes, differs from a department as

ordinarily used in the discussion of business organization; an administrative department, for example, may include several cost departments (subdivisions for cost accounting purposes); for purposes of collecting costs a department would (ideally) be restricted to an area in the factory which (1) includes only one kind of machine, (2) performs only one kind of operation, (3) incurs the same classes of expense over all the department, and (4) is under one centralized management. In practice this ideal situation is not always realized. If the machines in a given area are *substantially* alike, and the operations not too dissimilar, the area may be classified as a single department for cost purposes.

The reasons for thus defining a department are evident. If different kinds of machines were performing a variety of operations within a single department, it would be very difficult to find any reasonable basis for apportioning the expenses to the product of the department. If different classes of expense are incurred by the various units within a department, the correct analysis and distribution of these expenses become very difficult because some expenses will apply to some products and some to others. Finally a division of authority makes for a division of responsibility, and if responsibility is divided no single person can be held primarily responsible for departmental performance. One important by-product of the collection of costs by departments is its effect upon departmental responsibility. For these reasons a properly devised cost system will provide for departmentalization along the lines indicated.

Classes of Departments. Factory departments must be divided, for cost purposes, into two classes, *Producing* and *Non-producing* or *Service* departments. Producing departments are those in which work is actually performed on the product, such as the lathe department in a machine shop. Service departments are those which render services that contribute indirectly to the manufacture of the product, but in which no work is actually done on the product. Examples of service departments are the cost department, power plant, toolroom, and maintenance department.

The existence of these service departments adds another problem to the costing of the product. Since these departments do no work directly on the product itself, there is no basis for an apportionment of their cost directly to the product. It is necessary, therefore,

first to apportion the cost of a service department among the producing departments which it serves, and then to include this cost when the producing department expense is applied to the product of that department.

Summary of Direct and Indirect Costs. It has been noted that direct costs are those which can be directly charged to an order or to the product. All other costs are indirect in the sense that they cannot be charged directly to the product. These indirect costs may possess varying degrees of "indirectness," as follows:

- (1) Some indirect costs can be charged directly to a producing department and from there applied to the product of the department. These might be called direct departmental costs.
- (2) Other indirect costs can be charged directly to a service department, and then apportioned among the producing departments in proportion to service rendered.
- (3) Still other indirect costs cannot be charged directly to any cost department, but must be prorated to the departments, service and producing, on some reasonable basis.
- (4) Finally there are some indirect costs which may not be charged directly even to the factory division, but must be divided first between selling and manufacturing, and the portion allocated to manufacturing then prorated among the departments.

Fig. 1 shows a diagrammatic classification of direct and indirect costs.

THE VOUCHER REGISTER

For cost purposes the most important single record among the books of original entry, and the one least generally understood, is the voucher register. Because of its importance this record merits a brief mention here. The discussion will center largely on the use of the voucher register for cost purposes.

The functions of the voucher register, Fig. 2, (a book of original entry) may be briefly stated: It is the place of entry for all transactions which call for a disbursement of cash, either at the time of the transaction and its entry in this record, or at some time subsequent to the transaction. In other words, all cash purchases of assets or expense items, and all payments of liabilities, other than Vouchers Payable, are entered in the voucher register at the time the payment is made; and all expenditures that will call for a disbursement

of cash at some future time are entered in this same record at the time of the transaction and the incurring of the liability. The credit arising from an entry in this record is always to Vouchers Payable account with a offsetting charge to the asset, expense, liability, or proprietorship account or accounts affected. At the

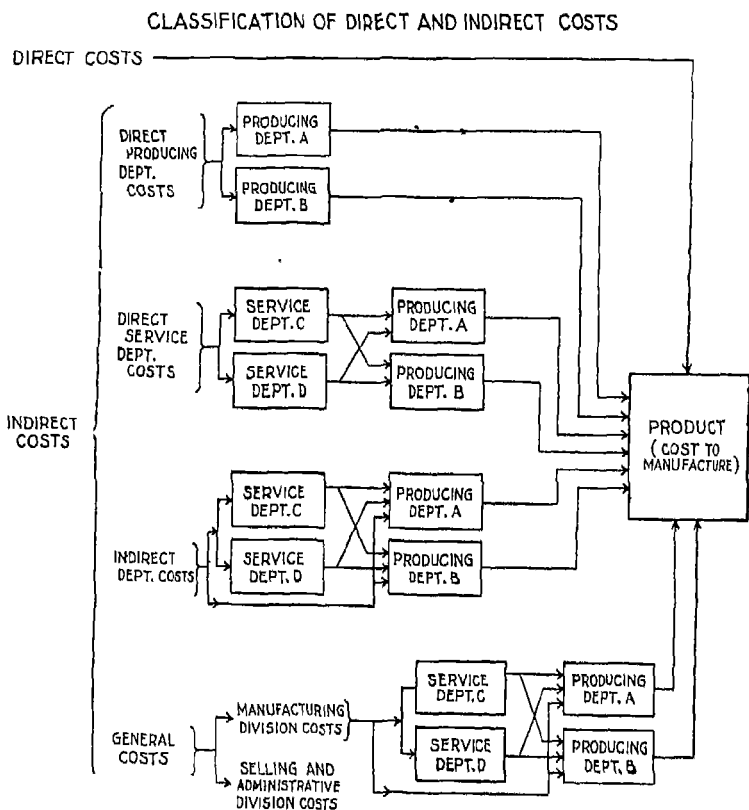


Fig. 1. Diagrammatic Classification of Direct and Indirect Costs

time of payment, whether it be at the time of the transaction or at a subsequent period, an entry is made in the check register (cash disbursements journal), Fig. 3, charging Vouchers Payable account and crediting Cash, and crediting Purchase Discount account for any deduction for payment within the discount period. It is evident that for cash expenditures the credit to Vouchers Payable from

Reference to Figs. 2 and 3, the voucher register and the check register, will assist in an understanding of their functions in the recording of transactions, particularly transactions dealing with costs. The convenience of this voucher record for recording ex-

[illegible]

Fig. 3. The Check Register serves as the cash disbursement journal

The use of this voucher register eliminates the purchase journal and the accounts payable ledger, and reduces the cash disbursements journal to the three-column check register, Fig. 3. It is obvious that the purchase journal is no longer needed; it is also clear that when all cash disbursements are distributed in the voucher register to the various accounts affected, the three-column check register is sufficient to record the actual cash payment. However, in order to understand why the accounts payable ledger is no longer necessary, an explanation of one additional feature of the voucher system is required. At the time the transaction is entered

in the voucher register, a *voucher* is made out describing the transaction and stating to whom payment should be made. If payment is made at once, this voucher is filed in a paid voucher file for future reference in case a question arises about the transaction. If payment is deferred, the voucher is filed in an *unpaid voucher file*, and this file serves the purpose of an accounts payable ledger. Each voucher is, in a sense, a subsidiary vouchers payable account. When payment is finally made, the voucher is removed and filed with the paid vouchers. To a certain extent the voucher register itself serves as a subsidiary vouchers payable record. When a voucher is paid, this fact is evidenced on the voucher register; hence the items not marked "paid" correspond to the unpaid vouchers, and the total of these unpaid items equals the credit balance in the Vouchers Payable account.

Numerical Symbols for Accounts. Referring again to the illustration of the voucher register, Fig. 2, it will be noticed that each money column for a controlling account is provided with a "code number" column. In the code number column is entered the numerical symbol designating the subsidiary account to which each item is to be posted. The purpose of this code number is to make possible the posting of each item to the proper subsidiary record, while the totals of the columns are posted to the respective controlling accounts in the general ledger. A proper classification of accounts and a systematic numbering system make it possible to indicate, by number only, the nature of the expense and the department or order to which it is to be posted. For example, suppose that the number 6 is always used to refer to the Manufacturing Expense controlling account; that the number 31 indicates the molding department; and that the number 12 refers to supplies expense. The number 63112 in the code number column would then indicate that the particular item should be posted in the Supplies Expense column of the proper standing order (Subsidiary Manufacturing Expense account) of the molding department, and that this same amount included in the column total, should be charged to the Manufacturing Expense controlling account on the general ledger. Of course the prefix 6 is unnecessary in a record where a special column is provided exclusively for manufacturing expense items, as in Fig. 2.

CHAPTER II

HOW COSTS ARE COLLECTED AND ALLOCATED

The preceding chapter on the nature and scope of cost accounting has, of necessity, been largely in terms of general principles with little application to concrete cases. To crystallize and give emphasis to these general statements there is presented here a detailed description of the organization and procedures by which manufacturing operations are controlled and the costs collected and allocated to products in a particular specific order manufacturing organization. Illustrations of the principal forms used are presented and one learns that the terminology used is not exactly standard. However, it is hoped that the reader can secure from this description a clear cut picture of manufacturing control and cost procedure as operated in this particular business organization.

The X Manufacturing Company of O . . . engages in the manufacture and distribution of a complete line of equipment and supplies for the carbonated beverage industry, including carbonic acid gas, soda fountains, syrups, crushed fruits, extracts and flavors, automatic drink-dispensing devices, and bottling machinery of all kinds. In addition to the main factory and general offices, there are some twenty-five sales offices, gas plants and gas distributing stations all through the United States and adjoining territory, an organization capable of rendering complete service to the industry in question.

Outline of Organization. The general organization of this company rather closely follows the usual functional type. At the head is the president, reporting through the executive committee to the board of directors; subordinate to him are the four major executives of the company, each having complete control of a principal function. These are: production manager, known as the vice-president in charge of production; general sales manager; secretary-treasurer; controller. Since this discussion is limited to

the production and cost accounting functions, which are under the controller, the other departments are dismissed with this brief mention, which serves to indicate the place of the production manager and the controller in relation to the rest of the organization.

Next to the president perhaps the most important man in the organization is the production manager, who has control over numerous and extensive activities. In addition to his indirect control of the various manufacturing divisions through the general works manager, he controls directly these heads of functions: purchasing agent, employment manager, traffic manager, head of general stores, master mechanic. These functions are listed only to demonstrate the fact that most of the direct control of the manufacturing divisions must of necessity be delegated to the general works manager.

The general works manager, whose official but not generally used title is the assistant vice-president in charge of manufacturing, directly supervises the five superintendents who are in charge of the five manufacturing divisions, the chemical engineer who is in charge of the gas plants, and the engineers of the power plant. The control of all functions that serve more than one division is decentralized, and is exercised by the respective division superintendents rather than by the general works manager. This is explained by the fact that the operations of any division may be very different from the corresponding operations performed in another division. This makes it difficult, perhaps impossible, to centralize such functions as internal transportation, engineering, planning, and similar activities.

All manufacturing operations are divided into five divisions, which are determined by the nature of the operations and the products produced. In addition to the gas plants and the power plant, there are five manufacturing divisions: machinery division; soda fountain division; apparatus division; fruits and syrups division; extracts division. At the head of each is a superintendent in full charge of all operations within the division; an assistant superintendent and a general foreman report to him.

Each division is divided into departments, the number and character of which vary from division to division and even from department to department, according to the nature and variety

of the operations performed and in accordance with the size and importance of the particular division or department. In addition to the "producing" departments each division contains an office, which includes a planning department, one or more storerooms, perhaps an engineering department, a packing department, a bonus and time study department, and in one or two cases a laboratory or an internal transportation department.

Planning and Control of the Shops. A few years ago the Gantt system of scientific management was installed in the main factory, and a modification of this system not very different from the original is still in effect. Of course, local conditions and circumstances have caused adaptations of some features, but in the main the system is still intact.

The ideal of the Gantt system is to have planning absolutely centralized in one department, from which department all of the operations of the factory will be controlled. This arrangement exists in this company only to the extent that the planning for each of the major factory divisions is centralized for the division in its division office. All manufacturing orders and purchase requisitions, all routing, scheduling, despatching, etc., for the division originate in its planning office. This office prepares an estimated time for each operation; written instructions are issued to the workmen; in many other ways the Gantt ideal of control of the shop by the planning office is carried out. The foreman of the department is relieved of all office and clerical work, thus leaving him free to see that the workman does his work efficiently, which after all is the real function of the foreman.

ORGANIZATION OF THE ACCOUNTING DEPARTMENT

Reporting directly to the controller are four minor accounting officials: (a) the cost accountant, in charge of all factory accounting, (b) the chief clerk who is in charge of the accounts receivable ledgers, the vouchers payable section, the notes receivable section, and the tabulating section; (c) the auditor or chief accountant in charge of the general ledger; and (d) the cashier.

The Vouchers Payable Section. All disbursements, whether for purchases of merchandise, for capital assets, or for expenses (except those handled at the branches), are made through the

voucher section and distributed on the vouchers payable register. Branch purchases are recorded and distributed at the branch and the original of the distribution sheet is sent to the main factory daily. Here they are filed and recapped at the end of the month when a summary distribution is made to the various expense and commodity accounts. The details of this distribution are kept on a separate Meilicke card system (information placed on hinged cards in a file for easy reference), by branch or main factory accounts, by commodities, etc.

Purchase Invoices. When the purchasing department has finished with the day's invoices they are sent to the voucher section. A special return tag is attached to those invoices representing goods not yet received from the supplier. The invoices on goods received are given an invoice number and sent to the cost accounting department.

Entries are made by the cost accounting department charging to the various manufacturing accounts the proper items from these invoices. These charges have already been made on the vouchers payable register, but only in total, since many subsidiary accounts in the factory accounting books are controlled by a single account on the vouchers payable register. The invoices which must be paid at once in order to secure the cash discount are handled first and quickly returned to the Vouchers Payable Section.

The factory accounting department detaches the duplicate invoices and sends them to the division offices interested for entry to the Balance of Stores cards, and posts to the expense ledger all items of manufacturing expenses. The invoices are then returned to the voucher section.

The invoices are now entered in the voucher register and distributed to the various asset or expense accounts, and filed in a tickler file while awaiting payment; payment is always made in time to get the purchase discount. Each day the invoices due are abstracted from the files, voucher checks are issued, and a voucher number entered on the invoice and in the voucher register to indicate that the payment has been made. The paid invoice and the duplicate voucher are filed together under the voucher number, except that the invoices bearing the return tags mentioned above must be returned to the purchasing department until the goods

have been received, at which time the invoice is sent again to the voucher section and filed as above. Information relative to the proper bank against which to issue checks is secured from the cashier.

The various suppliers are listed on cards indexed alphabetically, these cards containing the voucher numbers of all invoices purchased from the respective suppliers. This is to facilitate reference to the account of a supplier when a particular voucher number or numbers are not known.

Purchases returns and allowances are entered on the voucher register in red ink, from debit memoranda furnished by the purchasing department; the total of the red figures is subtracted from the total of the black ink figures in posting the various distribution columns. Copies of the debit memoranda are, of course, sent to the factory accounting department for its information.

The Auditor; the General Ledger. The auditor, who might perhaps better be called the chief accountant or head bookkeeper, though he is none of these exactly, keeps the general ledger and makes out all the financial statements, tax reports for the various states, and the income tax report.

The general ledger controls both the general accounting and the cost accounting. All entries to it are made on the basis of a journal voucher. Totals of columns in various books, such as the voucher register, the cash receipts book, etc., are posted to the controlling accounts in the general ledger by means of these journal vouchers. All of the ledgers mentioned among the books of record are represented on the general ledger by one or more controlling accounts. Miscellaneous entries are handled by journal voucher, such as shop orders containing manufacturing or selling expense, maintenance and equipment shop orders, goods received for stock and credit, free samples, "no charge" items, and adjustments of various kinds.

The Organization for Cost Accounting. The cost accountant is one of the four men reporting to the controller, and has, in that capacity, oversight of all factory cost accounting. He himself establishes and audits the factory accounting procedures, distributes the payroll, figures the overhead cost; he also has oversight of all the rest of the cost accounting system.

In addition to the cost clerks in the various division offices, who are not under his direct line control, the cost accountant has four assistants or clerks reporting directly to him. In general their respective duties are about as follows:

- (1) To assemble all manufacturing expenses
- (2) To establish and continually audit and correct the standard billing costs
- (3) To figure the gas costs of all the gas plants. (It might be noted in this connection that the gas plant manager, or chemical engineer, assists very materially in the figuring of these costs.)
- (4) To keep the plant ledger

Since the present controller was until recently the cost accountant, he retains in his new position something of his former supervisory control over accounting procedures, though this is being gradually relinquished to his successor.

Overhead Expense. Manufacturing expenses (overhead) are collected by the cost accounting department from these sources:

- (1) The distribution of the payroll
- (2) The voucher register
- (3) The expense requisitions for material
- (4) Journal vouchers
- (5) Sales of scrap and other special items

The above, with the general and administrative expenses, furnish the basis for computing the overhead expense which must be charged to the total product of the manufacturing divisions.

The general policy with regard to the application and distribution of overhead is as follows: in so far as possible the expenses are charged direct to the producing departments within the divisions; where this is not possible, an attempt is made to charge them to the division; the more general expenses which cannot be so divided are charged to the general expense accounts; all expenses, other than selling expenses, which have not been charged to the manufacturing (producing) departments are finally applied to the non-producing departments and distributed over the producing departments; thus the total producing department overhead is determined. It is charged to the product of the department on a machine hour rate basis. This rate is really a direct labor rate that varies between departments.

In a more detailed explanation of the above one might give miscellaneous illustrations of the different bases upon which the manufacturing and general expenses are applied to the various departments (this includes both producing and non-producing departments, such as office, stores, etc.); some of these bases will be seen to be more logical than others:

(1) The proper percentage of administrative and general office expense, and the general supervision of all the manufacturing divisions, are prorated to the departments within the divisions on an arbitrary basis which is determined by the executive committee.

(2) The direct general supervision of the departments within the division, including the salaries of the superintendent, the general foreman, and foremen, is charged to the division, and applied to the various departments on the basis of the number of workmen employed in each.

(3) Maintenance and repair of buildings is charged direct to the departments on the basis of the floor space occupied, while maintenance of equipment is charged direct to the department requiring the expenditure.

(4) Motor truck expenses are charged direct to the divisions on the basis of the hours required to deliver their respective products.

(5) Steam serves two purposes and the application of this expense varies with the time of year. During the summer all of the expense of producing steam is charged to Process Steam, and in the winter about 75 per cent of this expense is charged to Heat. In fall and spring the ratio is perhaps 50-50. The ratio for the particular month having been decided, the process steam is charged direct to the departments using the same on the basis of the amount of steam which the particular work requires, while heat is applied to all departments of the business on the basis of the floor space occupied.

(6) Electricity for power is applied to the departments on the basis of the horsepower of their equipment, light according to the number of globes in use.

(7) Fixed charges, such as taxes and insurance, are distributed on the basis of the value of the equipment; rent is applied on the basis of floor space occupied. Interest on the investment is not considered as a cost which is chargeable to the product.

(8) Depreciation (discussed in detail in a subsequent paragraph), since the rate varies from department to department, is charged direct to the department in which the particular piece of equipment is located.

(9) Laboratory expense is applied as follows:

(a) The extract division draws the largest charge, as the extract superintendent is in charge and this division is primarily served by the laboratory.

(b) The fruit and syrup, machinery, and gas divisions each draw a charge, the size of which depends on amount of service rendered.

(c) The sales department bears a very heavy charge, because considerable service is rendered to customers in the selling of extracts and especially in the analysis of water that is to be used in a new carbonator.

The above typical items of overhead (and others not mentioned) having been applied to the departments within the division,

the next step is the allocating of the expenses of the non-producing departments, such as office, stores, etc., to the producing departments. This is done on an arbitrary basis which is fixed by the superintendent of the division and the controller; the final result is that the producing departments have then been charged with the total of all indirect expenses and a proportional part of all general and administrative expenses.

A departmental machine or labor hour overhead rate must then be determined, based on the probable number of direct labor hours. The total average overhead of past periods, adjusted to any varying conditions in the present period, is divided by the total probable number of direct working hours. The working hours will depend upon the number of *machines* or *working places* in the department, and the total working hours in a year for each workman.

Any overhead or burden that is not absorbed by the application of the above determined rate to the orders as they go through the department is charged at the end of the period to Profit and Loss, and the departmental rate is adjusted so that, if possible, the overhead *will* be absorbed in subsequent periods.

PROCEDURES IN THE MANUFACTURING DIVISIONS

The principal procedures described here will have to do with the origin of a Manufacturing Order, the records used in connection with the planning, routing, and scheduling of the work through the factory, the method by which the material cost, the direct labor cost, and the indirect manufacturing expenses are collected and charged to the order, and other procedures. The reading of this section will entail some reference to the illustrations.

Origin of a Manufacturing Order. The original impetus for the making out of a manufacturing order may come from one of several sources:

1. If the inventory of any commodity in one of the storerooms falls to the minimum amount, the *order point*, the bin card, Fig. 4, is detached and sent to the division office, where it serves as the basis for a purchase requisition, or as a requisition for a manufacturing order, Fig. 5, depending on whether the particular material is commonly purchased from the outside or manufactured within the plant. If the material is purchased, a purchase requisition is

3. Under special circumstances a requisition for a manufacturing order may be initiated by those in major control in the division, even though the order point has not been reached or the goods

Fig. 7. This Master Route Card shows the necessary production or assembly operations for a manufacturing order

Planning Operations. From the approved request for a manufacturing order, Fig. 5, and the Master Route Card, Fig. 7, cover-

4. For each of the parts the master route card details are in terms of raw materials

The manufacturing order is prepared by the planning clerk in the division office. All of the information called for on this order is entered by the planning clerk with the exception of time to start and finish, which items are supplied by the layout clerk.

The route card is made out in duplicate, one buff card and one green one. It is an exact copy of the manufacturing order (see Fig. 8) except that it is made out on a stiff card instead of paper, and it does not show the estimated time for the operations.

The shop order, front side, is an exact copy of the manufacturing order.

At the same time that the planning clerk makes out the master route cards, Fig. 7, and the manufacturing order, Fig. 8, he also prepares these additional records:

1. The material requisitions which are necessary to secure the proper raw material or parts from one or more of the various storerooms.
2. A bin card, Fig. 4, which will be sent to the storeroom and upon which will subsequently be entered the quantity of the finished order received into the storeroom.
3. A balance-of-stores card, Fig. 9, upon which the balance-of-stores clerk will later record various information relative to the cost of the finished order and its disbursement on requisition or order.
4. A move ticket, Fig. 10. This is made up of two parts: the forwarding ticket, which finally goes to the division office, and the identification coupon, which remains with the material. It is made up in one of two colors, buff or green; the proper use of each color is explained later in the context.

There is a separate balance-of-stores card for each purchase order and for each manufacturing order. The receipt of the material or parts on these orders is entered on the proper balance-of-stores card, and issues are charged against that particular order, and at the actual cost per unit of that order, until it is exhausted, at which time the card is withdrawn from the regular files, filed in a "dead" file, and finally destroyed. The material or parts are

of-stores clerk, while the manufacturing order, Fig. 8, and the material requisitions go to the layout clerk. The layout clerk's record consists of a loose-leaf book in which the available working time for each machine in each department of the division is plotted, by hours, by days, by weeks, the basis being nine hours a day and five and one-half days a week; the time is plotted far enough ahead to schedule all of the shop orders started, and as far back as there are any shop orders scheduled and as yet unfinished. From the data contained in his records, and the information shown on the manufacturing order, the layout clerk assigns the various

REC'D ISS'D	FROM TO	DEPT. DEPT.
ORDER NO.	PIECES OR QUANTITY	
NAME OF PART		PART NO.
NUMBER OF CONTAINERS		
THE QUALITY OF ABOVE PARTS IS O. K.		
O. K. FOR QUANTITY ISSUED	FOREMAN OR ASST O. K. FOR QUANTITY RECEIVED	
CHECKER	CHECKER	
TO BE SENT TO MFG. OFFICE FORWARDING TICKET		
ORDER NO.	PIECES OR QUANTITY	
NAME OF PART		PART NO.
NUMBER OF CONTAINERS		
THIS COUPON MUST REMAIN WITH MATERIAL FOR IDENTIFICATION IDENTIFICATION COUPON		

Fig. 10. The Move Ticket consists of two parts—the Forwarding Ticket and the Identification Coupon

operations to certain machines (the machine group to be used has already been entered on the manufacturing order by the planning clerk) to be started and to be completed on certain days, and adds this information to the manufacturing order. From the now complete order still another clerk makes out further forms that are the same or very similar to the Manufacturing Order. These are: *

1. Two copies (one pink and one yellow) of the Shop Order (the front of the shop order is identical with the manufacturing order, Fig. 8, and is not repeated) for each department which is to perform operations on the order

2. Two copies (one buff one and one green) of the Route Card (this, also, is an exact copy of the front of the manufacturing order, Fig. 8)

At the same time the production and cost sheet is prepared for the order; this shows in what department and on what date each operation is to be started. This sheet goes to the cost clerk for further entries when the operations are completed. Simultaneously with the preparation of the shop orders, route cards, etc., the same clerk makes out a production and cost sheet and sends it to the cost summary clerk (also in the division office). At that time red lines are drawn across the columns to indicate the date on which the operation is to start in each department.

When an operation is completed and the yellow copy of the shop order comes to the division office, the information on the back of it is relative to the number or quantity completed in that department, the date completed and shipped on, etc., is posted to the proper column and date line of the production and cost sheet. When all of the order is completed and the assembly requisitions and the time tickets have come to the division office, and have been priced, extended, totaled, and summarized, they are posted to the production and cost sheets. A stamp is put on the sheet which provides spaces for the following information:

1. The number of units completed
2. The total direct labor cost
3. The total material cost
4. The total overhead expense cost
5. The total cost of the order
6. The unit cost per article completed

“Putting the Order Through.” At the end of each day, the proper shop orders, material requisitions, route cards, move tickets, and other forms concerning work to be done are delivered to all departments; at the same time the delay reports, Fig. 11, and the copies of the order of work, Fig. 12, are collected.

The delay report, Fig. 11, supplements the daily order of work. The final column, headed “action,” is for the use of the planning clerk in the division office. After investigating the reason for delay, he enters in this column a new scheduled starting date which,

when returned to the department, replaces the starting date shown on the original shop order.

The order of work, Fig. 12, is prepared in triplicate by the foreman of each manufacturing department at the end of each day to indicate the order of work for the following day. It is dated for the following day. One copy goes to the division office on the evening of the day prepared; the second copy goes to the set up man on the morning of the day dated. The third copy is held until the evening of the day dated when the last five columns are filled in and the form is then sent to the division office.

To the department which is to perform the first operation on the order are sent the move ticket, the two copies of the route card,

DATE	REQ'D										DELIVERIES

Fig 13 Records of completion of operations and movement of parts or materials are kept on the reverse of the yellow copy of the Shop Order, Fig. 8

two copies of the shop order, and the material requisitions that are necessary to secure from the storerooms the material required for the operations in this department. To all other departments which are to perform operations on the order are sent two copies of the shop order and the necessary material requisitions.

Procedure in the Department—the Pink Shop Order. In the department office the *pink* shop order is filed by the foreman or time clerk under the number of the first machine that is to work on the order, thus indicating how many jobs are ahead of this machine. Later, when the operations are completed and the goods “moved on,” this copy of the shop order stays in the department office for the information of the foreman, and he may file it or destroy it, as he sees fit.

The Yellow Shop Order. The *yellow* shop order is filed by order number, and as the various operations are completed or partly completed, the proper entries are made on the reverse side of this Shop Order, Fig. 13; these entries cover the date, the amount

of material or number of parts received from the storerooms or from the preceding department, and the amount or number sent to the next department or to the storeroom. When all operations on the order are completed by a department and the last quantity of material or partially finished product is ready to be sent to the next department or the storeroom, this yellow shop order accompanies this last "shipment," together with the move ticket, Fig. 10. Upon receipt of this last "shipment" the next department or the storeroom will check the total quantity and send to the division office the yellow shop order and the upper half of the move ticket. Thus the location of the order is always known in the division office (which is in reality the planning department of the division).

The Material Requisitions. Upon their arrival in the department office (or later if the operations are not to be started for a while) the material requisitions are sent to the proper storeroom and the material or parts called for are delivered by the storeroom force to the department requesting them. When the material has been delivered the storekeeper sends the yellow material requisition to the division office, while the white copy accompanies the material to the department and goes to the department office. It is from these yellow material requisitions, which are sorted by order number in the division office, that the material costs are obtained for the entries to be recorded on the loose-leaf production and cost sheets.

Back Orders for Materials. If all of the items called for on the material requisitions are not on hand in the storeroom (they should be on hand, because the material requisitions have been approved by the balance-of-stores clerk for just that purpose) the items that cannot be delivered on the date called for are marked with a cross, and the remainder are delivered to the proper department. The time clerk of that department "back orders" the material that is not in stock, that is, he issues a new requisition covering these items and sends it to the storerooms to await the arrival of the stock, at which time it will be delivered under the usual procedure.

The Move Ticket. The move ticket, Fig. 10, serves two purposes. The move ticket accompanies goods between the manufacturing departments and, immediately upon receipt of the goods

by any department or the storeroom, the upper half is detached and sent with the yellow shop order to the division office; the lower half of the move ticket stays with the goods at all times for purposes of identification. If the material in the order moves between departments in a single "shipment" only, a *green* move ticket is used. If the order goes in "split shipments," a *buff* move ticket is sent with each separate shipment, and the *green* ticket with the last shipment. Other than in color, the two move tickets are identical. It will be noticed that, of necessity, a new move ticket is made out by each department working on the order; the lower half of the ticket received from the preceding department, which has served to identify the goods, is destroyed when the operations are completed in this department. A new ticket is attached before shipment to the next department.

The Route Cards. The *green* route card is filed for reference in the department office, by order number, while the *buff* route card and a production card, Fig. 14 (this also serves as a time ticket), properly time-stamped and filled out by the time clerk or foreman, go to the workman at the machine. This route card serves as an instruction card to the workman in that it tells him what to do, the question of how to do it being a matter of proper supervision by the foreman or the set up man. The route card does not contain the estimated time for the operation.

The production card (or time ticket), Fig. 14, is issued in three colors, white, blue, and red, all being identical except for color. The white ticket is used under usual circumstances, the blue for overtime, and the red in case of tardiness of the worker. This is perhaps the most important record of the department and serves more purposes than any other; the information on the card is posted to the shop order (yellow copy), to the man record, to the production and cost sheet, and to the payroll record (in the accounting department). The reverse of this card has columns for continuing the entries of production and cost data.

When the operation is completed and the work properly inspected by the foreman or his assistant, the proper entries are made on the production card or time ticket, Fig. 14, and it and the route card go back to the time clerk. The time ticket (production card) is time-stamped and a new one issued to the workman for the next

COST ACCOUNTING

operation, while the route card and a proper time ticket go to the next workman to work on this particular order. The route cards follow the order through all departments until it finally arrives in the storeroom; there they are destroyed.

In the case of a "split shipment" the same procedure is followed with the route cards as with the move tickets. The buff route card goes with the first shipment, while the green one goes

RET'D						OPERATION			
ISS'D									
NAME						NUMBER			
TIME ALLOWED			TIME TAKEN			OPER. FINISHED			
			HOURLY RATE			OPER. NOT FIN.			
						TRANSFERRED			
PAY FOR			WAGES			BREAKDOWN			
						CAUGHTUP			
MACHINE NO.			RATE			EXPENSE			
ORDER NO.		OPER. NO.	PART SYMBOL	AMT FIN.	HRS TAKEN	WAGES	EXP. RATE	EXPENSE	
ENTERED IN					O K. FOR QUALITY		O.K. FOR QUANTITY		
SHOP ORDER	MAN RECORD	P & C SHEET	PAY ROLL						

PRODUCTION CARD

Fig. 14. The Production Card, or Time Ticket, contains a complete record of the original entries of labor expended each day by a single workman

with the last shipment. This makes it necessary, of course, to use the green route card as an instruction card for the workman in the first department after the first shipment has been sent to the next department.

The Production Card (Time Ticket). Time tickets, Fig. 14, stamped with the first hour of the day (7:30 a.m.) are issued to the workman each morning. Each of these will be filled out in detail by the workman himself, by the time clerk, by the foreman,

COST ACCOUNTING

Upon the basis of the above record the poorer workmen are released in a slack time, and the best ones picked for promotion. This card often proves to be a very convenient record for reference in a dispute with a workman as to whether or not he earned his bonus on a certain operation.

NO OF PIECES REJECTED		DATE REJECTED		REJECTED ON ORDER NO	
NAME OF PART REJECTED				PART NO REJECTED	
MATERIAL					
REJECTED IN					
OPER NO	OPER NAME			DEPT	
REASON FOR REJECTION					
NO TO BE RE-WORKED		NO TO BE SCRAPPED		NO TO BE RETURNED TO SUPPLIER	
FAULT OF					
SUPPLIER		SHOP DEPT.		ENGINEERING DEPT	
		OFFICE		OBSOLETE STOCK	
REJECTED BY					
NO	REPAIR OPERATIONS OR INSTRUCTIONS			DEPT	MACH
SIGNATURE OF FOREMAN RESPONSIBLE					
WORKMAN'S NUMBER					
REMARKS					
REJECTION NOTICE					

Fig. 16. Whenever a manufacturing department finds defective goods the time clerk sends this Rejection Order and the defective items back to the department responsible

It will be noticed that no records leave the office in the department except the time ticket and the route card. The workman does not know the estimated time for each operation, it being thought best that he should not. The above does not hold true

of bonus operations; special instructions and information as to time allowed is furnished for such work.

The Order of Work. From the incoming shop orders (and from the preceding day's order of work, Fig. 12, and revised delay report, Fig. 11), the foreman, or his assistant, makes out his daily

SUPPLIER'S NAME							
PURCHASE ORDER NO	DATE REC D	STORE ROOM	BAL. CL. PRK	PROD AND COST	PROG- RESS	DIST	
MATERIAL COST EACH	MATERIAL COST EXTENSION						
COST OF RE-WORKING							
	MATERIAL	LABOR	EXPENSE		TOTAL		
TOTAL							
UNIT							
<div style="text-align: right; margin-bottom: 10px;">CHARGE TO _____</div> <div style="text-align: right;">SIGNED _____</div> <div style="text-align: right; margin-top: 5px;">SUPT OR HIS ASST.</div>							

Reverse of Rejection Order, Fig. 16

order of work, in triplicate, scheduling his work for the following day. The white copy goes to the division office for control purposes. The blue copy goes to the set up man for his guidance in starting the workmen on their operations, getting their tools and material ready for them, and perhaps aiding them in setting up

their machines. The yellow copy remains in the department office until the evening, at which time it is sent to the division office with the operations that have been finished marked off with a cross. All operations that have not been finished are carried over on the next day's order of work. From these yellow copies the layout clerk in the division office marks off the operations that have been finished. When all operations on a given page in this record (one page covers a month's time) have been completed and marked off, the page is removed from the record and destroyed.

A weekly order of work is sent from the division office to the general works manager; this differs from the above daily report only in that it covers the production of major units and is not detailed.

The Delay Report. For any one of various reasons it may be impossible to complete the operations as scheduled. It may be that the material is not available, that the workman is absent, that the operation in the preceding department has not been completed on schedule and the order has not yet reached this department, that the machine is out of order, or numerous other reasons. If for any of these or other reasons the operation is going to be delayed, the foreman so enters it on the delay report, Fig. 11, which goes each evening with the order of work to the division office. There the reason for the delay is investigated and a new starting and finishing date is assigned for the operation and then entered on the delay report; this new report is delivered to the proper department the following day.

A weekly delay report is sent by the division office to the general works manager; it, also, is in major units and not detailed.

The Rejection Order. When a partially completed order has been received from a preceding department, and the material (even after work has been started on it) or workmanship is found to be defective, and so must be "worked over" or repaired, the time clerk of the department receiving the goods makes out a rejection order, Fig. 16, in duplicate. One copy goes with the defective work or material to the foreman of the department responsible for the defect and is signed by him, and the work is started again at the place where the mistake was made, or before that, if necessary. The other copy goes to the division office and a new production and cost sheet is prepared for the operations necessary to bring the order

to the same state of completion as existed when the defect was discovered. This special production and cost sheet, and all material requisitions and time tickets in connection with it, bear the same shop order number as the original order, but are all stamped "re-work." When the rework job is finished these new material requisitions and time tickets are sorted and charged to the rework production and cost sheet in the regular way. If the total cost of the rework is not too great, that is, if the original order will "stand it," it is added to the cost of this order. If it is entirely out of proportion to the amount of the order and would make that cost too large, it is charged direct to the department responsible for the defect, and is added to the overhead of that department.

ENTRIES TO CONTROLLING ACCOUNTS

Direct labor, direct material, and overhead expense, are charged to the respective orders on their respective production and cost sheets by means of the material requisitions and the time tickets from the manufacturing divisions. Charges to the controlling Work-In-Progress account are made from three courses:

1. When the material requisitions have been posted to the production and cost sheets in the division office, they are sent to the cost accounting department, and there the total is charged to Work-In-Progress and credited to Raw Materials (usually all stores are classed as raw materials until ready for sale).

2. The time tickets accompany the material requisitions to the cost accounting department, and the total overhead expense shown thereon is charged to Work-In-Progress and credited to Burden account. Unabsorbed burden, as above stated, is charged to Profit and Loss account at the end of the period.

3. The total direct labor is not computed from the time tickets, as one might expect, but is arrived at by subtracting from the total payroll the total indirect labor as shown by the foremen's recapitulation of indirect labor. This difference, all of which is assumed to be direct labor, is debited to Work-In-Progress and credited to Payroll accounts. It is obvious that this is scarcely a scientific way in which to determine the direct labor charge, and the discrepancy between the amount so obtained and the total charged to the production and cost sheets from the direct labor tickets,

office for each commodity handled, that is, each item of raw material, each part, each assembly, and each complete unit. Postings to this record are made from the production and cost sheets, and it is upon the basis of the information contained on this card that comparisons are made between the costs of different orders, and the average cost of the various items determined for the purpose of fixing the standard billing costs which are used in the periodic cost audit by the cost accounting department. The card which is used for the items *purchased* is similar, except that it provides for the name of the supplier, the terms of purchase, and other data taken from the purchase invoice.

Computation of the Payroll. The payroll is computed from the time tickets which are sent daily to the payroll section of the cost accounting department. Overtime is paid for at one and one-half times the regular rate, but the time ticket does not include the *excess* charge for overtime. The total number of hours worked is computed at the regular wage rate and the *overtime excess* is calculated weekly on the payroll record, being based on the difference between the total hours worked and 49.5 hours, the regular full-time work for a week. This *overtime excess* is charged to indirect rather than to direct labor. Bonus wages are computed on the back of the time ticket and are charged to direct labor. The time tickets are filed permanently in the payroll section, alphabetically by workmen.

Depreciation. Depreciation is not calculated at a uniform rate, but a different rate is placed upon each unit or group of units of equipment. A detailed plant ledger is maintained and a very accurate record kept of depreciation, repairs, replacements, new machinery, and other related items. It is a question in the mind of the present controller as to whether or not the returns from such a system justify the great expense which is necessary to keep all the required records. It is possible that in the near future the plant ledger will be discontinued and depreciation will be calculated at practically a uniform rate.

All depreciation is calculated on the straight line method. If the charge is found to have been too great or too small in the preceding years, an adjustment to Surplus is *not* made, as one might expect, but the rate is changed and the effort made to "catch

up," or the reverse. It is seen that this method might unduly burden some periods, at the same time giving others an advantage, but the result over a number of years is approximately the same.

Gas Costs. The method of manufacturing the carbon dioxide gas makes it necessary to use a process method of cost finding. All costs are charged to the process, and the total cost is divided by the total number of pounds of gas manufactured; the result is the cost per pound compressed. The figures for computing these costs are obtained from these sources:

1. A payroll distribution from the branches gives the labor costs at the gas plants.
2. The voucher distribution of the main factory and of the branches gives the amount of other expenses.
3. A report of the amount compressed is received daily from the gas plants.
4. A report of pounds shipped is received daily from the sales department.

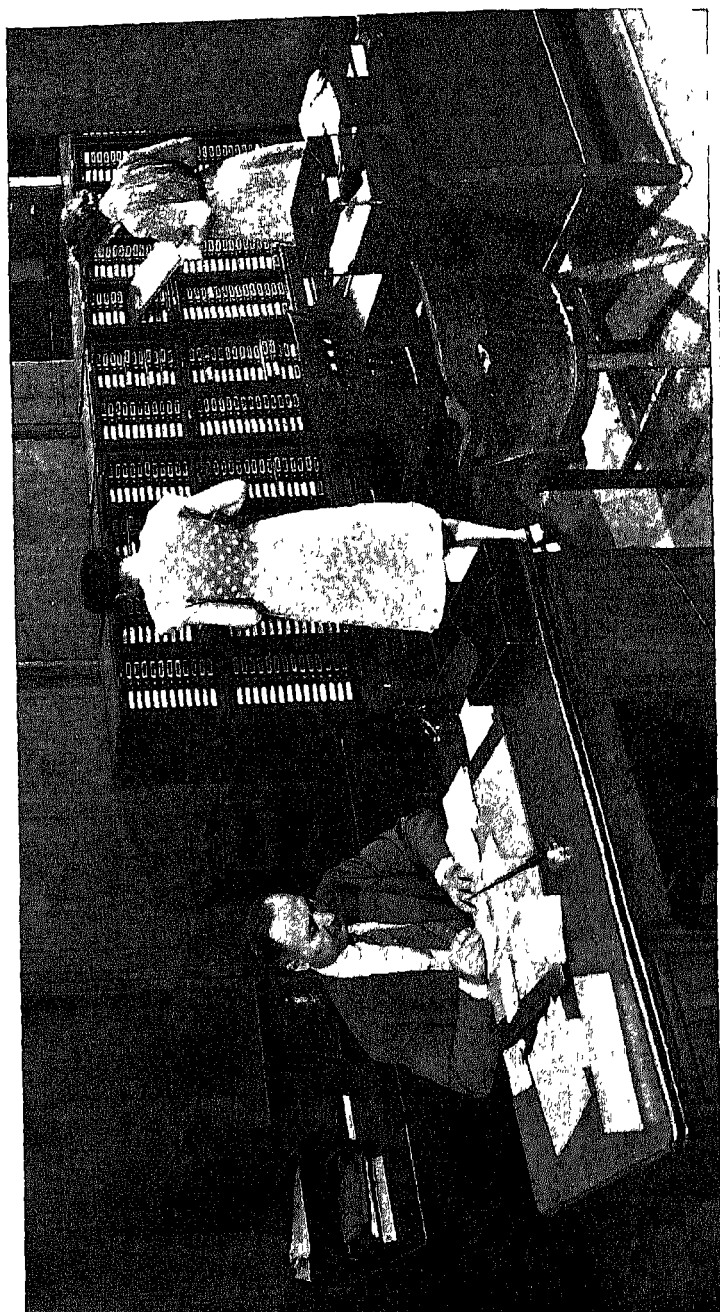
So far as the direct costs are concerned, each day is complete in itself, because the plant is closed down each night and the uncompressed gas is allowed to escape; therefore, there is no Work-In-Progress inventory and very little other inventory. However, a monthly charge is made for the fixed costs and the general expenses, and these are added to the total costs for the month. It is at this time that the total cost is divided by the total pounds compressed to arrive at the cost per pound. Also, if there is any discrepancy (and there usually is) between the total pounds compressed and the total pounds shipped, adjusted, of course, to any change in inventory on hand, this loss is added to the cost of pounds shipped, no effort being made to discover the source of the loss which may be due to leakage of drums or to failure of the sales department to properly account for all gas sold.

Gas costs are kept entirely separate from other costs, and the attempt is made to determine them very accurately. There is a standard cost determined and set up for each plant, and any variation from this standard is carefully investigated.

Standard Billing Costs. Upon the basis of average costs for past periods a standard cost for each commodity has been established, which is used as the billing cost to branches. Formerly goods

were billed at actual costs, but this resulted in an irregular cost that varied with each order, and was sometimes unfair to particular branches. The standard billing price has two advantages. First, the constant price gives a better control of branch gross and net profit. Second, it is not necessary to wait for the actual costs from the factory divisions and the cost accounting department.

The accounting procedure with reference to billing and actual costs is as follows: the billing cost is debited to Cost of Sales and credited to Billing Cost of Shipment to Branches; the actual cost, when the figures are obtained, is debited to Actual Cost of Shipment to Branches and credited to Finished Goods. Any discrepancy between the two accounts, Billing Cost of Shipments and Actual Cost of Shipments, is adjusted into the Cost of Sales account at the end of the year for the final statement figures, but this adjustment is not taken up on the books.



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AUDITING

PART I

GENERAL TERMS DEFINED

The word *auditing* is so broad in its application and so often loosely referred to by the public, that a clear understanding of the subject is necessary at the very outset of our studies. The following definition of the word *auditing* is taken from the Century dictionary.

Auditing. "Official examination and verification of accounts or claims; an examination into accounts or dealings with money or property; especially an examination of accounts by proper officers, or persons appointed for that purpose, who compare the charges with the vouchers, examine witnesses, and state the result."

This definition is quoted chiefly not because it is at all comprehensive, but it does illustrate the lack of knowledge, almost general, many years ago, as to what an audit really is. The definition quoted was a true enough description at that time. A large majority of audits consisted entirely of a comparison of the records of cash payments with the vouchers therefor, and, if there seemed to be an agreement between the payments and what purported to be evidences that someone had received corresponding sums, then the so-called auditor considered his task completed and wrote out a certificate. This certificate was usually broad and unqualified.

Accountancy has developed so rapidly in the United States in the last fifty years that it has become necessary to analyze and study the services performed by public accountants and to prepare a logical classification of the services rendered by them. The Committee on Accounting Terminology of the American Institute of Accountants has developed a somewhat detailed classification of auditing services as shown by the following definitions.*

Audit. "An examination of the books of account, vouchers, and other records of a public body, institution, corporation, firm, or

*The Journal of Accountancy (Vol. XLIV, pp 448-452) for December, 1927.

individual, or of any person or persons standing in a fiduciary capacity, for the purpose of ascertaining the accuracy and integrity of the accounting and of certifying thereto upon the statements rendered.

"In the absence of any qualifying expression defining the extent to which it has been limited, an audit is understood to be an examination of the subject matter of the accounting in all its financial aspects, covering, to the extent that these several classifications of accounts may be involved, the verification of assets, liabilities, receipts, disbursements, income, expenditure, capital and reserves and their application; surplus and profits and their disposition, in such detail as may be necessary in the circumstances of each individual case to permit of an unqualified certification of the accuracy of the statements rendered and of the proper accountability of the fiduciary parties."

In practice an audit is in many cases limited in varying degrees recognized by custom and indicated by qualifying expressions, as *balance sheet audit*, *cash audit*, *partial audit*, and *special audit*. Audits not necessarily limited in scope are frequently given other designations or descriptions, as: *complete audit*, *continuous audit*, *detailed audit*, *external audit*, *internal audit*, *private audit*, *public audit*, *examination*, and *investigation*.

Balance Sheet Audit. "A balance sheet consists of the verification, as of a given date, of the assets, liabilities, capital, surplus, and of all reserve accounts, including as incidental thereto such examination of the operations as may be necessary to give credence to the stated financial condition.

"It does not include the detailed vouching of *all* receipts and disbursements or all details of income and expenditure, nor does it establish the accountability of the fiduciary parties, except on broad lines.

"It should be accompanied by a report stating the nature and extent of the verifications which have been made, drawing attention to any items requiring explanation or comment, or by a certificate stating the opinion of the auditor as to the correctness of the statement submitted, or by both report and certificate."

Cash Audit. "A cash audit is an audit limited to the verification of cash transactions for a stated period, for the purpose of determining that all cash received has been duly brought into ac-

count and that all disbursements are properly authorized and vouched.

"A cash audit is detailed in character but limited in scope. It is concerned with the sources of receipts and the nature of disbursements only to the extent necessary to substantiate their accuracy. Such an audit establishes the accountability of the persons charged with responsibility for cash, a certificate to this effect being given on a summary in appropriate form of the cash transactions for the period."

Complete Audit. "A complete audit is one in which the examination extends to a verification of the details of all the books of account including subsidiary records and all supporting vouchers, as to mathematical accuracy, complete accountability and correctness of accounting principle. In modern practice such an examination is seldom made."

Continuous Audit. "A continuous audit is one in which the detail work is performed either continuously or at short regular intervals throughout the fiscal period, usually at the shortest intervals (e.g., weekly or monthly), at which subsidiary records are closed and made available for audit in controllable form. Such 'continuous' work leads up to the completion of the audit upon the closing of the accounting records at the end of the fiscal period. A continuous audit differs from a periodical audit, even though the detail work be performed, for example, monthly, in that no report is made, except of irregularities detected and adjustments found to be necessary, until the end of a completed fiscal period, and further, that the certification of balance sheet figures, as such, may be deferred until the fiscal closing. A continuous audit is not necessarily a complete audit, but may be limited in scope according to understanding and as may meet the requirements of the individual case."

Detailed Audit. "This is similar to a complete audit, but sometimes a series of tests is substituted for a complete audit of each and every entry.

"In some cases an audit may be detailed and yet limited in scope, e.g., a cash audit.

"The form of report will depend on the scope of the work, but so far as the work goes, will follow the corresponding portion of a report of a complete audit."

External Audit. "This term is not in common use, but is occasionally used to indicate an audit by some one, such as a public accountant, external to the concern being audited."

Internal Audit. "This term refers to an audit made by members of the staff of the concern audited. Frequently 'staff auditors,' 'traveling auditors,' or 'inspectors' are employed to make continuous or periodical audits of some or all of the transactions; the scope is not definite, and their work is frequently supplemented by examinations made by public accountants."

Partial Audit. "A term used to describe (a) a special examination of some portion of a set of accounts or records or of all the accounts for an incomplete period, such work being the subject of specific instructions describing and limiting its extent; or (b), more inexactly, a test of the detailed transactions made in conjunction with a balance sheet audit."

Private Audit.* "Private audits may be divided into two classes: (1) where the auditor is instructed by his client to perform certain specified auditing duties which, when he has discharged them in accordance with such instructions, terminates such duties and at the same time his responsibilities; (2) where he is instructed by one or more individuals, who may be interested in some business or estate, which although not registered under any act of parliament, is nevertheless subject to some agreement or deed, or testamentary document, and perhaps also subject to some act or acts of parliament and subsequent legal decisions."

Public Audit.* "Public audits are those which are carried out under the provisions of an act or acts of parliament, or under the clauses of a royal charter. In such cases the auditors are appointed in accordance with the provisions of the act of parliament or of the royal charter combined with special regulations or by-laws made in conformity therewith, and although these duties are not actually defined, the forms of the accounts which they have to certify, either with or without qualification, are frequently prescribed."

Special Audit. "An audit made for any purpose other than the verification or certification of statements of account presented according to regular procedure at the close of an accounting or fiscal

*The use of the terms "private audit" and "public audit" is confined to British practice. The definitions are from Pixley's *Accountants' Dictionary*, p. 64.

period is a special audit. Such an examination may be one where specially exhaustive attention is given to detail, or it may, on the other hand, be a sketchy examination of some limited feature of the accounts. An interim or periodical audit made in the regular course, however, is not a special audit."

Examination. "Without some qualifying term the word examination has no definite accounting meaning beyond that given by the dictionary. It is used in accounting in conjunction with a statement of what has been examined."

Investigation. "An investigation, in the accounting sense, is a special examination of books and records, in the course of which the auditor selects and follows any lines of inquiry that seem to him most useful in obtaining the specific information that is the object of the investigation. As a rule some parts of the audit are stressed and some passed more lightly; and reference may be made to records and books other than those that are being investigated. The program of work lies largely in the auditor's discretion and is varied during the course of the work whenever matters are found needing inquiry.

"An examination made for the purpose of financing, frequently covering accounts extending over a period of years which may or may not have been previously audited, is commonly referred to as an investigation.

"The proper use of the word 'investigation' in connection with accountancy implies some particular object to be gained, or particular result stated, and indicates something different from an audit; hence it is seldom, if ever, necessary to qualify it by the addition of 'special' or any similar expression."

THE AUDITOR'S QUALIFICATIONS

The man who expects to succeed in the field of public accounting and auditing must possess as minimum requirements the following:

- (1) A high degree of analytical ability.
- (2) Constructive ability.
- (3) An understanding of the general principles of economics.
- (4) Thorough training in business organization, management, and finance.

- (5) A knowledge of business law.
- (6) Thorough training in the fundamental principles and theory of all branches of accounting, including general accounting, costs systems, auditing procedure, and income tax.
- (7) The ability to write clearly, forcibly, concisely, and correctly.
- (8) Some knowledge of the special way in which various particular businesses are conducted.

Many years ago, in his address at the first meeting of the Institute of Chartered Accountants, the President of the Organization clearly advocated this doctrine when he said:

"No accountant can successfully carry on his practice in all the required branches unless he is a person of considerable knowledge, skill, and experience, for he must not only be acquainted with bookkeeping, which is to him as the alphabet only, but, to put it very briefly, he must have some general knowledge of various trades and their customs. . . . He ought also to have some knowledge of the practice of the Stock Exchange."

If anyone who has commenced this course has not had a fairly thorough training in bookkeeping of a varied nature and in addition has not had sufficient practical experience in business affairs to enable him to think and act quickly, he had better postpone his course in auditing until he has acquired enough experience to make a good student. The only man who can learn anything worth while is he who has the temperament and mental equipment to place himself in a receptive position. Applying this to auditing, it is absurd for every student to take it for granted that a good memory applied to the auditing lessons for a specified number of hours per lesson will make him a good auditor.

You have presented to you a branch of the accountancy profession which requires a prodigious amount of application, a rare combination of tact, business knowledge, and judgment, broadmindedness, ability to concentrate oneself completely for days, perhaps, at a time, and inclination to forego sleep, food, friends, society, and almost — family. And it is well known that not a large proportion of men are willing to tie themselves down to such an extent.

The following memorandum prepared by the late Charles W. Haskins, C. P. A., is pertinent to the subject under discussion:

The successful auditor is not made by the study of textbooks or by any other form of merely academic instruction; nor can his work, like that of the bookkeeper, be completely illustrated or tested by any number of set problems in theory or practice. He must be, it is needless to say, a master in accounting and able to comprehend quickly any honest entry made in a book of account; but, inasmuch as he is likely to meet new problems in any piece of work he undertakes, it is desirable that he should have a broad general knowledge of business, and it often happens that he needs the intuitions of the detective no less than the skill of the accountant. His work is necessarily analytic. He must read from the books and records the history of what has been done, and beyond that, he must seek to know if everything that has been done is fully and correctly recorded.

But, while books and teachers cannot make an auditor, they can do much to help him. Much of the accumulated experience of the profession has been preserved in books and periodicals and in traditions, and out of this experience has grown an approved general course of procedure that is of great value.

Your attention is also called to what Mr. A. Lowes Dickinson C. P. A., has to say on this subject:

Bookkeeping is a simple science, and complete mastery of its principles does not call for any very high order either of intelligence or of education. Bookkeeping, however, is only one, and perhaps the smallest, of the necessary qualifications for the public accountant who would succeed in his profession.

The public accountant acting as a professional auditor must be familiar with the general principles of Commercial and Common Law, including that relating to corporations, bankruptcy, and trusts; he must be acquainted with economic and banking principles; and with those underlying the valuations of property of all kinds. But his knowledge of all these subjects is a means to an end, and that end is the application thereof to that one subject of accounts, in which his skill specially lies; while on the more complicated legal, economic or valuation questions he must, and does, consult those other business advisers who have special skill in these matters. There is probably no other profession, not even excepting that of law, which requires of its members, if they would succeed, a higher standard of education, experience, and general business knowledge.

The moral qualities called for are so high that it should place the profession at the head of all which come into contact with business affairs. The lawyer's duty is first of all to his client, and that duty frequently compels him to avail himself of technicalities and other means of enabling that client to evade the law and its penalties; but the public accountant has only one duty to his client and to the public, and that is to disclose to him or for him "the truth, the whole truth, and nothing but the truth," so far as his abilities and special training to that end enable him to ascertain it. No legal quibbles will save him from moral condemnation if he fails in this duty; no juggling with words and phrases will absolve him from responsibility, moral and often legal, for results which he has reason to know are not what they seem to be, or which, having regard to his special training in business affairs and the accounts

relating thereto, he ought to have known did not represent the facts. Errors there may be and must be, and for errors made after full and proper precaution taken and due care exercised no responsibility will lie. But there is no profession in which the results of careless errors or misstatements will more certainly bring retribution.

If enough has not been said to discourage you, you should realize that the professional auditor must not only *know* about as much as three average men to start with, but after he does start he must *do the work* of about three men to keep up the pace. This comes in through the necessity of taking in hand the best possible care of each day's tasks — which is one man's work. Second, there is an actual demand on him to keep up with *general* business and financial conditions — this means reading newspapers which contain reliable business news and which employ financial writers of known ability; the reading of reviews of new books in the field of accounting and related business fields, reading these books themselves when they are of special interest; reading articles in the leading accounting journals; attending the meetings of accounting organizations and taking part in their discussions; reading other magazines which contain many articles bearing on business subjects. Then he must read books and special articles on trade conditions, money systems, foreign exchanges, etc. He should at least read as much along the lines of his future work as is required of a law student along legal lines, and the latter covers tens of thousands of pages of textbooks, reports of cases, digests, etc., before and after his examinations.

The third section of his work consists in the exercise of that dual personality which must be acquired and constantly exercised by reason of the necessity of looking after other work, other clients, and his own assistants — while purportedly concentrating all of his attention for a full day on the particular work in hand. This latter phase is of much importance and many professional auditors, while appreciating its importance, fail to strike or keep a proper balance between the two and do not prosper. The successful lawyer has the same problem before him for he constantly has a number of cases partly finished and must dispose of all of them. So the auditor will have at times far more than he can do, and at other times less than he desires. Therefore it is an important factor in his program to look ahead as well as to take care of current affairs; he practically never

cleans up; never feels that a day's work is really complete, even though he has used his brain to its limit for a considerable part of twenty-four hours. How much more desirable it seems to hold down a job where at four or five o'clock you can forget the cares of business and turn to recreation or study along some other line, or become acquainted with your family. But it sounds fine when you read an advertisement which tells you to become a *Certified Public Accountant* and earn twenty-five to one hundred dollars per day and thus gain independence. If becoming independent consists in working under greater pressure than in any other profession or business, subjecting your mind and nerves to a more complete strain than is usual or even possible in legal or other severe mental tasks, and running the constant risk of breaking down in health as is the case with many successful accountants every year, and, in addition to all, incurring for this twenty-five or so dollars a day (if you really get it) a moral and legal responsibility running into perhaps thousands of dollars a day, you can proceed as indicated and gain independence.

When a lawyer renders an important opinion involving thousands or millions of dollars he charges accordingly; when the surgeon performs an important operation he asks a large fee; but when the accountant renders service of equal value, takes the same professional risk as to using reasonable skill, he receives, as a rule, a much smaller fee in proportion.

But if you love the work, if you have a passion for analyzing financial statements, if you can become engrossed in working out complicated problems in accountancy, and if you are in dead earnest about it, then you should forsake all else and plunge into what will prove to be fascinating beyond your utmost hopes. While the profession of the public accountant may never return to you a pecuniary recompense equal to what is commonly known as a *good income*, yet you may have that higher satisfaction of knowing that you have accomplished a work requiring mental skill and effort equal or superior to the highest class of human endeavor.

The statement is frequently made that the real *simon pure* auditor is the one who has gained all his skill through the daily grind of actual experience; but this assertion, like many other ill-considered ones, can be disposed of by citing the case of the man who builds a machine by personally making each individual part

and then assembling them; he may, perhaps, build two or three complete machines during his lifetime but would it be reasonable for his son to pursue the same course if he could have someone else make the individual parts, and, under his direction, have someone else put them together. In this way he might build one or more a day. The son would probably know as much as his father with respect to *how* the parts were made and *how* they were assembled, but he could put in the greater part of his time to better advantage than spending it on non-essentials. So the auditor of to-day can secure a good theoretical knowledge of the underlying principles of auditing by using the recorded experiences and suggestions of those who have preceded him. There can be accomplished in months what years of experimenting and testing would hardly cover.

Anything which stimulates thought is valuable, providing, of course, that the thoughts are properly directed. Therefore there is a distinct gain to the man who thinks above the one who does not, for the latter is after all compelled to use his mind sooner or later and, if he waits until a condition arises before he begins to formulate his plan of action, he will not only retard the work and thus displease his client but he will do less valuable work because in thinking and acting simultaneously he does not have time to reflect, but must plunge in and act somehow, and, if he finds later that he did not start right, he must begin again and perhaps he will make an equally unfortunate blunder next time.

Now the majority of audits can be largely mapped out before the work is commenced, and in many instances before the books are inspected for the first time. Conditions may compel a change in procedure but in few cases will there be any change in principle, and in any event you will convey the impression to your client and his staff that you know exactly what you want and, as the first impression is about as important as the last, you will win half the battle before you begin.

It may as well be mentioned here that Audit Companies, composed of bankers and others who are not qualified accountants, cannot expect to have the standing of professional auditors; it is true that there are audit companies owned and controlled exclusively by public accountants of recognized ability but so long as most of them are run on commercial, money-making lines they cannot expect to be treated with respect.

We are supposed to have been considering the qualifications of the members of a *profession*. Is it not absurd to call a corporation a *professional auditor*? Where can personal responsibility for unprofessional conduct be placed? As a matter of fact the whole theory of the confidential relations supposed to exist between a professional man and his clients is upset when a corporation claims to be able to do professional work.

THE OBJECT AND SCOPE OF AN AUDIT

The next point to be considered is the object and extent of an audit. The object of an audit may be said to be threefold:

- (1) Detection of fraud
- (2) Detection of technical errors.
- (3) Detection of errors of principle.

Detection of Fraud. On account of its intrinsic importance the detection of fraud is clearly entitled to be considered an "object" in itself, although it will be obvious that it can only be concealed by the commission of a technical error, or of an error of principle. It will be appropriate, therefore, to combine the search after fraud with the search for technical and fundamental errors; but it can never be too strongly insisted that the auditor *may* find fraud concealed under *any* item that he is called upon to verify. His research for fraud should therefore be unwearying and constant.

It has been asserted by some that the whole duty of the auditor is to ascertain the exact state of his client's affairs upon a certain given date. This is, in effect, the same thing as saying that he is only responsible for the correctness of the balance sheet. Even if this be the case—and it is open to considerable doubt, as the extent of an auditor's duties depends entirely upon the terms of the express or implied contract between himself and his client—the balance sheet cannot well be verified without a proper examination of the revenue account, which in its turn involves a complete examination of the books.

The detection of fraud is a most important portion of the auditor's duties, and there will be no disputing the contention that the auditor who is able to detect fraud is—other things being equal—a better man than the auditor who cannot. Auditors should, therefore, carefully cultivate this branch of their functions—doubtless the oppor-

tunity will not for long be wanting—as it is a branch that their clients will generally appreciate.

Detection of Errors. Before dealing with the various methods to be adopted to insure the detection of errors, it will perhaps not be out of place to inquire what is the *extent* to which an auditor is expected to carry his research. This will naturally vary according to the circumstances of each individual case; but even allowing for this, the greatest diversity of opinion obtains, some claiming that an auditor's duty is confined to a comparison of the balance sheet with the books, while others assert that it is the auditor's duty to trace every transaction back to its first source. Between these two extremes every shade of opinion may be found; and, among others, the opinion of most practical men. Were the auditor's functions limited to a certification that the balance sheet submitted to him was in accordance with the books, it would be difficult to conceive why the amateur auditor should have been found so lamentably wanting; on the other hand, it cannot be denied that—except in concerns of comparative insignificance—a minute scrutiny of *every* item would be quite impossible to the auditor; nor, indeed, is such a detailed audit often necessary, although it is in the highest degree desirable that every concern should possess the means of enabling its own staff to make such an examination for itself.

In undertakings where the transactions are too numerous to justify checking every entry, it is usually possible to test the accuracy of the bulk of the work by aggregates which appear in subsidiary books and ledgers, and which are represented in the general or private ledger by controlling accounts.

It is in the highest degree necessary that the auditor, before commencing his investigation, should thoroughly acquaint himself with the general system upon which the books have been kept.

In England it is customary in most cases, and compulsory in others, for the auditor to be supplied with a list of the books in use, but in this country the list is in nearly all cases either not supplied at all or else it is made by the auditor himself during the progress of the audit. Such a practice is, indeed, very desirable. It cannot be too strongly insisted, however, that such a list can only be of any real utility when the auditor thoroughly grasps the uses, and the

possible abuses, of which each book is capable. Numerous instances have been known of an audit entirely failing through neglect of this precaution.

Having thoroughly made himself master of the system, the auditor should look for its weakest points. *Where is fraud most likely to creep in?* he should ask himself; and, if he can find a loop-hole, let him be doubly vigilant there. But never let him for a moment suppose that, because he sees no opportunity for fraud, none can exist. To the intelligent auditor who has grasped his system thoroughly, it is generally practicable to dispense with some portion of the mechanical means of checking. To what extent this can be done with safety must always remain a question for each auditor's own intelligence and experience to answer, and it may be added that probably he must take the risk of any consequences that may ensue; but—so far as the matter can be explained in a general treatise—its solution will be sought after in these lessons.

Before leaving this subject, it may, perhaps, be well to add that, under the expression *mastery of the general system*, perusal of the partnership agreement, the charter and by-laws of a corporation, recorded contracts and agreements, State laws, and any and all other documents that in any important way affect the general constitution of the concern, are included.

ADVANTAGES OF AN AUDIT

The question has been raised from time to time as to what advantages may be reasonably expected from a proper professional audit of accounts and the student who is looking forward to the career of a professional auditor should always be ready to do missionary work along the line of educating the uninformed.

In addition to those heretofore mentioned, as coming under the head of the primary *objects* of auditing, it may be pointed out that the proprietor or proprietors of a business will not only have the advantages of having placed before them an accurate statement of their affairs, together with a profit and loss account showing how this position has been arrived at, but that they would also have available certified accounts as to operations and profits which cannot fail to be of the greatest convenience, in the event of their wishing to sell

the business to a private individual, or firm, or to an incorporated company, or in the event of one of the partners dying or wishing to retire, or for the purpose of submitting a statement to banks as a basis for loans. One of our most eminent New York bankers in a recent address to a bankers' convention advised those present to require prospective borrowers to furnish statements prepared by *certified public accountants*, and bankers are now advising their customers to submit certified balance sheets.

It is now very common, though not universal practice on the part of bankers to demand certified statements from all of their borrowers. Some state legislation restricts to certified accountants the preparation of statements for credit purposes. Under any of these circumstances the importance of a thoroughly reliable statement of profits cannot well be overestimated, and the convenience it affords — as well as the enhanced price which can be obtained in the event of a sale — will under all normal circumstances more than compensate for any slight expense which the audit may have originally involved. It is, of course, quite clear that one of the reasons an enhanced price may be obtained is, that in considering an ordinary statement of profits, no matter how carefully it may be prepared, it is usual for prospective purchasers to “discount” the results, while an audited statement can be safely taken at its face. So far as private firms are concerned, an efficient audit possesses the further advantage that, by reason of its insuring a periodical preparation of reliable accounts, it tends to minimize the risk of partnership disputes, with all their attendant annoyance and expense.

In the case of corporations the audit assumes a slightly different aspect. The company auditor is not expected to act as the financial adviser of the undertaking — a position that is frequently thrust upon him in connection with private audits — his duty being rather that of an auditor appointed in the interests of a *silent* partner. It devolves upon him to examine the accounts of their stewardship, prepared by the active partner — *i.e.*, the directors — and to state whether in his opinion those accounts are correct, and fully and fairly disclose the position of affairs, or in what respects they fail to do so.

In addition, it may be pointed out that an auditor, through gross negligence, failing to discover fraud or embezzlement on the part of the employes of the client, may possibly be held liable in damages.

It is quite clear that under no circumstances can any professional audit be regarded as so complete a safeguard as to constitute, in effect, an *insurance* against fraud; and it has been expressly held by English and American Courts of Appeal that an auditor *is not an insurer*. There is, however, a vast difference between holding an auditor liable as an insurer and expecting him to provide such reasonable safeguards as will, under all normal circumstances, preserve the undertaking against loss owing to dishonesty. Dealing with the matter first of all from the purely commercial—and, therefore, from the lowest possible—standpoint, the minimum premium charged by an insurance company for a guarantee of honesty is thirty cents per hundred dollars, and a higher premium is almost invariably charged in the case of employes. A comparison of this figure with most audit fees will show that, if any credit at all is to be given for the actual work of examining the accounts (which work is, of course, never performed by a liability insurance company), little, if anything, remains to cover an *insurance* of the honesty of the staff; while a slightly broader—and, therefore, more common-sense—view of the situation must, of course, show that the risks which insurance companies, with their large paid-up capitals, can afford to run in the ordinary course of their business are far different from the risks that any individual professional man could prudently accept. Thus, on the grounds of law, equity, and expediency alike, it is clear that an auditor does not guarantee his client against all loss by dishonesty.

This, however, is—it need perhaps hardly be pointed out—a very different thing indeed from an entire disclaimer of all pecuniary responsibility. The mere fact of an auditor attaching his signature to the accounts of an undertaking is a distinct *representation* to all whom it may concern that the accounts in question have been audited by him; and all, therefore, who are entitled to rely upon this representation are clearly entitled to the assurance (using the word in its popular sense) that the work alleged to have been performed has been conducted with a reasonable amount of skill and care. The exact effect of this *assurance* in each separate case must, of course, be determined upon the merits of that case; but the safeguard afforded by the personal responsibility of the auditor is, in itself, by no means a negligible quantity. Further, it may be pointed out that, in the case of professional auditors, whose living depends upon their

reputation for skill and care, a far greater measure of security is provided than the mere legal limit of the responsibility of the auditor. For obvious reasons it would be inexpedient to strain this legal responsibility too far, or the effect would inevitably be to drive men of substance out of the profession; the chief safeguard of a professional audit, and its great superiority over an amateur audit, lies thus, not in any increased measure of legal responsibility but in the safeguard afforded by the fact that the professional depends for his livelihood on his business reputation as a careful and skillful auditor, whereas the amateur obviously does not.

Official Auditing. As distinguished from the *professional* auditors we have the *official* auditors, who are employed to audit the accounts of State and Municipal authorities, as well as those appointed by the courts of the various states to examine and pass upon the accounts of decedents' estates, etc. The latter are almost invariably lawyers, and the most important part of their duty appears to be to scrutinize the various transactions, with a view to seeing that they are not *ultra vires*. This is, of course, a very important matter, but it is to be regretted that the attention of official auditors should be—as in point of fact it is—almost entirely restricted to a scrutiny of the accounts from this standpoint, with the result that, although the accounts are supposed to be checked with a view to detecting error and fraud, it has frequently transpired that dishonesty has remained undiscovered for a very considerable period, and that the accounts themselves are grossly inaccurate in essential particulars.

It is suggested, therefore, that, for the accounts of estates to be really effectively audited, the investigation of the official auditors, with their legal training, should be confined to a scrutiny of the various transactions from a legal point of view, the actual checking of the accounts themselves being performed by professional auditors, who, by their training, are far better qualified than any lawyer to detect both errors in bookkeeping and dishonesty on the part of those having the handling of money. This, it is thought, is the true solution of the difficulty; but, because these matters are frequently settled by favor, and rarely on their merits, it is not likely to be adopted.

Still another class of official auditors includes various employes of National and State Departments who almost invariably secure

their positions through political influence, but upon whom devolves a vast amount of work which more properly belongs to professional auditors. It is altogether likely that the inefficiency of many of these men will lead to reforms in this direction, which cannot help increasing the scope and responsibility of the work of the certified public accountant.

It must be taken into consideration, however, that official auditors usually work under disadvantages in that they are not only limited as to the scope of their examinations, but, furthermore, the time at their disposal is usually too limited to admit of a thorough audit in most cases.

The more prominent of the official auditors included in the last class are National and State Bank examiners, State Auditors employed by the Departments of Insurance, Charities, etc., and examiners connected with the Bureau of Corporations of the Department of Commerce and Labor.

In recent years there has been a strong tendency towards Government supervision, with the consequence that the number of official auditors has greatly increased, and in all likelihood the accessions to the ranks will continue. It is not proposed to criticise nor even discuss the work done by these officials, but it is not out of place to call attention to the fact that the salaries attached to the positions are, for the most part, considerably too low to attract first-class men.

There are, therefore, two reasons at least why official auditors are not so competent as professional auditors, one being the fact that nearly all of the appointments are in payment of political debts, with the consequent result that wholly inexperienced and incompetent men are frequently chosen; and, secondly, even if the places were filled solely upon the basis of merit, it is not to be expected that capable men will be found, in any great number at least, occupying positions of great responsibility but with small salaries attached.

GENERAL PRINCIPLES WHICH UNDERLIE ALL AUDITS

The underlying principles of auditing are theoretical and are not subject to change to fit particular businesses or special systems of account. They are few in number and can be applied indefinitely. Let us examine them—assuming that the audit covers a past date.

- (1) The auditor must ascertain that all of the assets shown by the books to have been on hand at a certain date *were* actually on hand.
- (2) He must ascertain whether any other assets, not on the books, *should* have been on hand.
- (3) He must ascertain that the liabilities shown by the books to be owing at a certain date were *actual* liabilities.
- (4) He must ascertain whether or not *all* liabilities were in fact shown by the books.
- (5) He must ascertain whether or not liabilities so shown were *properly* incurred.
- (6) He must ascertain whether the earnings shown by the books were properly *accounted for*, and whether any of the earnings were *omitted* therefrom.
- (7) He must ascertain whether or not the expenses and losses were *properly* stated and supported.

You have been asked and you will be asked again, not only during your student and State Board days, but throughout your entire professional career, "How would you audit the accounts of a blank company? How would you proceed, etc.?"

Special knowledge is not required of any but a very few undertakings (such as stock brokers'), although, of course, it is extremely desirable. The underlying principles of auditing as summarized above are valuable; you need to add to them, among other things, the ability to read a balance sheet understandingly before you begin an audit.

In the accounts of a printing house, a wagon factory, or a gas company, the captions of the accounts will, naturally, differ; the books will differ somewhat in their ruling; the names of the books will differ sometimes, for it is quite possible that the consumers' register in the gas company and the pay-roll in the wagon factory will each be called by their proprietors the *red* book.

Do not assume the attitude that there is anything sacred about the usual technical names of ordinary books of account; let your client call his own books by any names he pleases.

If you have not been able to secure the last balance sheet or trial balance, make one up from the books. You will then find what you are looking for or else discover quickly what is lacking.

Do not be too technical—leave it to the lawyers. If the minute book of a corporation whose stock is all owned by four or five persons does not indicate a meeting for several years, although the stockholders' personal accounts indicate that profits have been credited thereto, do not assure them that they are in a bad way. If the profits have been credited equitably and the concern has actually earned them and is not insolvent, and if the State has not been defrauded out of taxes, do not make a fuss, and if they wish to continue in the same unscientific way do not stop them and no Court will. Therefore, what accounting or legal principles have really been violated?

It is of course not strictly ethical for an auditor to point out methods of evading or reducing taxes levied upon individuals or corporations, but so long as our corporation laws are inequitable and are framed in utter disregard of convenient accounting there would seem to be no moral turpitude involved in assisting a client to reduce his taxes to a minimum provided that you keep strictly within the law.

Above all be of value to your client. Make your audit worth a little more to him than the amount of your fee. As an example, take the case of a manufacturer who also owns trucks, and where supplies have been sold; not one such man in fifty cares whether or not his bookkeeper credits a sale of tires to the garage account or to the general sales account, but fifty men out of fifty have a reasonable cause for complaint against an auditor who would fail to discover that tires *were being sold*, and that garage expenses *were increasing* beyond reason, the latter being readily discovered by analyzing the accounts and making up a comparative statement, and this discovery in turn uncovering the fraud. So be practical. Don't attempt the work of a professional auditor unless you *know* that you are able to take such a broad view of a balance sheet that you can see not only what *is* there but what *should be* there.

The most important work of the auditor today is to prevent loss, not so much in the way of defalcations, but in the sense of business failures or bankruptcies. A careful audit by a trained professional auditor should disclose the approximately correct financial position of his client. As soon as all business men actually believe that the certificates of *certified public accountants* to balance sheets are an indication that the assets and liabilities therein stated are dependable, auditors will have more work than they are able to take care of.

Auditors lose sight of the fact that the closing of books and the resulting balance sheets are based on estimates only. Some men spend many hours in adjusting balance sheet items representing a few hundred dollars in order to correct a few trifling errors when there were valuations of hundreds of thousands of dollars in plant, merchandise, stocks, etc., all of which were necessarily estimates and which fluctuated from day to day—as must the value of all materials and goods.

Spend more time on essentials and cut down the time on non-essentials. Put yourself in the position of a possible purchaser or stockholder of the concern you are auditing. What items would interest *you* in such a contingency? Surely not the smaller and unimportant items, but those assets on whose value the success or failure of future operations must depend and those liabilities the classifications of which will reveal to you the time in which they must be met.

An engineer recently, when asked about the value of an accountant's services, said that they were of value chiefly to add up and subtract, but that he alone could be of real service in arriving at the valuation of the capital stock of a certain company. This is true of many auditors who do little more than the work described, but it is not true of the auditor who takes the proper view of his work and who realizes that he is not engaged as a bookkeeper, nor as a copyist. The latter term should be applied to all auditors who certify that the balance sheets they submit "are in accordance with the books" and stop there. Any boy from a business college can go through a ledger and verify a trial balance, and such service is worth three or four dollars a day. When you commence to charge that much an hour, you must do very different work.

In actual practice the auditor's appearance is usually expected; if the audit is a periodical one, an approximate time of commencing is known in advance; and if it is a special engagement, in most cases the negotiations with the auditor are known to all in the client's office.

There the auditor can exercise a little tact or diplomacy; the cashier may for instance balance his cash late in the day and if it is much of a task he will be anxious to hurry off home upon the striking of a balance. The wise auditor will make it a point to tackle him first thing in the morning at a time when the memoranda of the day have not commenced to accumulate and when the cash book is written up and the footings shown.

Very often slips of paper, tickets, and so-called vouchers will make up a large portion of the *cash* in the drawer. In all cases count the actual money first and then list the memoranda. Make your notes full and complete for there may be some delay before you refer to this list again, and cases have been known where unauthorized tickets carried as cash have mysteriously disappeared immediately after an auditor's count of the drawer.

If there is a difference between the amount on hand and the balance called for by the cash book or the round sum carried in the ledger as a petty cash fund, do not assume at once that there is something wrong.

You should put your own footings in the cash book in red ink and initial the figures; with this information in your possession together with your count of the cash drawer you can afford to give the cashier a chance to hunt for the difference. If he has balanced the night before, the error will no doubt be in your own figures, and if you have gone about the matter in the right way you can reconcile your items harmoniously. Of course, if a shortage exists it will soon develop unless the cashier makes a good enough explanation, but his evidence must be complete to deceive a good auditor.

After the petty cash or cash drawer is verified, the bank accounts should be proven. The only safe way is to have the pass books sent to the bank forthwith and after balancing delivered only to you or your representative. This means a delay of a day or two; in the meantime you can proceed with the next item on your program.

In a *special* or *limited* audit there may be no real necessity for counting the cash on hand nor for verifying the bank accounts. Frequently an auditor is requested to examine into the earnings and financial condition of a certain business and it is expressly understood that an audit is *not* desired. Your client may wish to assume the responsibility of taking the honesty of the accounts for granted and may direct you to confine your investigation to an analysis of the operations and to other special features. You are justified here in following instructions for after all your client is the one to please and unless you are asked to certify to something which you cannot approve, there can be no objection to your omitting almost any part of the work upon which you would insist if the audit were supposed to be a complete one.

Too much emphasis cannot be laid upon securing a clear insight into the whole scheme of accounts just as soon as possible. This should not interfere with the orderly carrying out of the program which we will assume has been made up, at least tentatively, before the commencement of the work; but it is sometimes practicable to take a general survey of the various books and their uses, the last trial balance, the journal entries, etc., within a very short space of time, all of which will help in adjusting the program to actual conditions.

WORKING PAPERS

It is not strange that a chapter should be devoted to the subject of *working papers*, for it is a matter of so much importance that it deserves the emphasis thus placed upon a much neglected topic.

It is too bad that illustrations cannot be given of how things should be done and how they should *not* be done. Perhaps the assertion that the skill of an accountant can always be ascertained by an inspection of his working papers is too sweeping, but it will hold good in so many cases that it may as well be called a general rule and, therefore, warn all prospective auditors that they may be so judged some day.

If a professional man were as careful with his tools as is the mechanic, he would do better work and he would save himself many hours of duplicate work. The average lawyer makes his notes on scraps of paper and in such an unsystematic way that an orderly filing of them is impossible. Subsequently (in many cases) the notes cannot be found or, if found, they cannot be understood. Fortunately for the lawyer his notes are, in a majority of cases, not required later, which accounts perhaps for his carelessness.

Now an accountant should be the personification of order and system. Even if he is not so naturally, he must appear so, for his business is to criticise slack methods in others and construct proper systems for those who have none. Therefore, he should at least convey the impression that he appreciates order and good methods and be able to demonstrate this by an exhibition of the highest possible degree of perfection in his own working papers.

Stationery is cheap, far cheaper in proportion than the implements or tools used by mechanics, and yet many accountants will use a scrap of paper or the back of an envelope to make a record in

connection with an audit where the item so noted is important enough to be set down in an orderly way on a whole sheet of specially ruled paper. It really seems absurd to devote space to any lengthy review of this matter and it is only because there is such a widely prevalent looseness well known to the writer, that this emphasis is given to the use of good stationery, and importance placed on plenty of stationery always being available.

An accountant or a bookkeeper should have on hand at all times a complete assortment of specially ruled paper of all sizes. Let him consider this as part of his plant, if need be, although a very small expenditure will secure a large supply of paper. The special rulings should cover every form for which there may be the slightest call.

With respect to money columns, paper should be ruled having from three to eighteen columns. The former will be the most used, but there is a constant call for the latter. Then, of course, ledger-ruled paper will frequently be used, and it is very desirable to have ledger paper with two money columns on both sides. The paper should be furnished in pads of fifty sheets each.

In commencing an audit a full assortment of paper, together with various colored pencils or ink, etc., will be gathered together and preferably carried in a stout leather portfolio with a first-class lock on it and containing convenient *pockets* for papers, pencils, rubber stamps, etc.

It will be a great convenience to head up several sheets of paper at the commencement of an audit along the following lines:

Cash vouchers lacking

Errors in footings—cash

Errors in footings—sales book

Errors in postings—private ledger

There should be an absolute rule strictly adhered to forbidding the writing of more than one class of errors on the same sheet of paper. If, for instance, an audit developed but three errors in footings and postings, one being in the cash book, one in the journal, and one in the sales ledger, there should be three sheets of paper submitted at the close of the work, one error appearing on each.

The reason for this is evident. No one can tell how many errors *may* develop and it is almost criminal for an accountant to write and rewrite and classify and reclassify his memoranda during the course

of an audit when every bit of the rewriting and reclassification could have been avoided by simply using one sheet of paper for one class of errors, or queries.

As intimated above there is a general habit to minimize the importance of working papers and while the client suffers most because his affairs are not properly looked after, yet the auditor who starts in wrong does himself positive harm by not getting the most out of each engagement.

To make the latter statement clearer let us imagine an auditor who is careless about his working papers. He has taken up an audit and, having forgotten to supply himself with stationery, has called on his client's supply. Irregular pieces of scrap paper are supplied to him and on these he makes his various notes and comments. He dislikes to ask too often for paper and so economizes by using both sides of some pieces and fills others to the limit. By the time the audit is completed he has a veritable mess of scraps; he then vainly attempts to make sense out of a lot of notes which were considered of great importance when made and which would have been written out properly if the means had been at hand.

How is it possible for such a man to write a report of the greatest possible value to his client? Even if he finally deciphers all of his notes and does not forget to look on the back of every scrap, he has made so much trouble for himself that in consequence thereof he has written a report in a troubled and irritated frame of mind and his careless style has, of course, permeated the text.

Consider the case of an auditor who takes the trouble to provide himself with an ample supply of paper; who uses a separate sheet for each class of error, suggestion, or comment. When he is ready to unite the report he merely sorts his working papers and with full notes before him, with no irrelevant matters constantly interrupting his train of thought, has simply to proceed in an orderly manner to the close.

Is it worth while?

Who has the best chance for another engagement from the clients so served?

VERIFICATION OF FOOTINGS AND POSTINGS

The auditor of a large concern must give due weight to the general system of accounts in use and to the internal check, if any, which

exists. If the concern is large enough there will be an auditing department with its own staff, but in order to do the greatest good to the greatest number it will be assumed that not one of you for some years will be required to audit the accounts of a concern with its own auditing department. The National City Bank of New York is not the best example to use in explaining bank audits; the Pennsylvania Railroad when railroad accounts are considered; nor the United States Steel Corporation when the audit procedure of a manufacturing corporation is outlined. As soon as you commence to secure clients of such size you will know enough about auditing to work out your own salvation; in the meantime, let us address ourselves to establishments doing a comparatively small business—where you will not be overawed by clerks and officers whose salaries make your incomes look sick.

It will have to be a very small business, however, where there can be a justification for verifying every posting and every footing. In past years about half of the auditing which has been done has consisted of the laborious work of checking back postings in detail and verifying the footings of all books including the ledgers. An actual analysis of various defalcations which have occurred in recent years demonstrates the fact that the percentage of frauds which have been concealed by false postings and incorrect footings is small. This small percentage may be covered just as well in what may be called a *test* audit as in a so-called *detailed* audit. Of course where books are out of balance there is a distinct value in checking over as many postings and footings as possible, for it not only gives the auditor a chance to see at first hand the sort of errors which the bookkeepers have been making and thus furnishing data for his report, but it helps along the current work, and if all the differences are located he will earn the goodwill of the bookkeeper, which is a most important matter. The undertaking of this sort of work is dangerous, however, unless it has been definitely arranged with the client and he is convinced that part of the work being done is that of an accountant and part that of an auditor.

Some auditors are fond of testing the ledger postings by making up their own controlling accounts, or else reversing the process and; by analyzing each ledger account, extract the totals of each source of original entry. There are certain very exceptional cases where this

plan may be followed, principally where the ledger is not in balance. It is an old-fashioned scheme, however, and has no place under modern methods in a well-ordered plan. It is useless to minimize the importance to the auditor of being able to say subsequently that he has ascertained that the books *were* in balance and that what might be called the arithmetical equilibrium *was* fully established; but this benefit is small compared to the enormous advantages which accrue to the auditor who knows enough to be able to prove such work by tests and thus gain valuable time which can be devoted to other and more important work—more important because the largest number of frauds occur in other places than footings and postings. Therefore in that vast number of audits where there has been no fraud, but where the auditor wishes to justify his employment, *all* the constructive or labor-saving suggestions will arise from the other portions of the work.

Many cases are known of audits, occupying say four weeks, where the verification of footings and postings has taken three weeks and all the rest of the audit has taken one week. Obviously there can be no hard and fast rule as to the time each class of work should take and it is not worth while to attempt to approximate one, but it must be obvious that unless there is some specific justification for this division it would be far better to spend one week on postings and footings and three weeks on work which afterwards may mean something to the clients.

Now the question arises: Is it not possible that in cutting down the work by two-thirds too much has been taken for granted and that an auditor would not be excused who neglected such a material part of the work as footings and postings? The latter part is answered by the statement that no auditor can be excused who *neglects any part of the work*; the former query is a pertinent one and you must therefore be sure in each case which is presented that you take nothing for granted until you have made such intelligent and exhaustive tests as will assure you that the accounts as a whole are, in your judgment, correct. Note the expression *in your judgment*, for the moment the auditor is deprived of the free exercise of his judgment he is reduced to the position of an automaton, and the title of *professional auditor* becomes a misnomer. What is an intelligent and exhaustive test of postings and footings? In answering, first of all direct your

attention to the general groups into which they can be divided. The four great divisions are:

- (1) The records of the purchase of goods or materials as reflected in purchase or invoice books, voucher registers, etc.
- (2) The records of sales as found in sales books or binders or in any one of the various good or bad forms used.
- (3) The receipt of cash.
- (4) The payment of cash.

The majority of postings and footings occur with respect to the records mentioned so that if you can agree on what constitutes a fair test of these groups or divisions you can safely leave the remaining records to be dealt with on their merits.

The following suggestions are definitely grounded upon the fundamental principle that no audit is complete unless the trial balances of all the ledgers have been proved; there may be exceptions as, for instance, a department store where they have one hundred individual ledgers; but it has been agreed to omit the procedure required in such a concern, and it will be assumed that in all the cases under consideration, the trial balances of *all* ledgers will be verified.

Purchase Records. If fraud exists with respect to purchases it usually will be found in overcharges, or fictitious vendors, and very seldom, if ever, will there be any concealment of fraud through manipulations of footings or postings. It is assumed that auditors are not seeking to locate clerical errors in trial balances, but to concern themselves with the possibility of the trial balance, which is ostensibly in agreement, being *forced*. As this occurs not only in cases where fraud exists, but also where there is a lazy or incompetent bookkeeper, one must always be on the lookout for evidence of forced balances. As a rule, however, where a trial balance is forced, there will be no alteration in the current postings and footings. The usual and popular expedient is to alter in the ledger the last posting, during the period, to one of the large nominal accounts, such as sales or expenses.

These remarks as to the trial balance have a bearing on purchase records to the extent that whatever detail work is omitted, the verification of the postings of the monthly or periodical aggregates must not be forgotten. By this is meant the debit side of the purchase ac-

counts. Usually you can safely omit the checking of all of the credit postings.

As to the footings in a fairly large concern, prove the footings of about every tenth or twelfth page, in addition to the last page of each month, where the audit covers a period of one year.

In a smaller concern prove, say, every fifth or sixth page, including always the last page of each month. It is hard to imagine, and wide experience has not developed a case, where such a percentage would not have been sufficient in any given audit where, as a matter of fact, *every page* was footed. That is, the verification of every page did not disclose any discrepancies (except as hereafter noted) so that, naturally, the work could have been cut down eleven-twelfths with equal results (except as to cost to the client). The last page in every case is mentioned particularly because instances are known where such figures have been altered.

Sales Records. The monthly or other aggregates of the sales postings should be checked. If there is a controlling account with customers in the general ledger, it will not be necessary to verify in detail the postings of the customers' ledgers. If there is no controlling account, you should construct one, so in neither case is it worth while to prove the debit postings.

Remember right here that there is more fraud in connection with accounts receivable than in any other department of a business; but the fraud does not consist in a failure to post the sales which are recorded *in the sales books* to the ledgers. The fraud comes in through omitting the sales from the sales records entirely or else through failure to enter cash collections.

It is, of course, important to know that all the sales appearing in the sales record have been posted; as stated above this can be and should be covered by use of a controlling account as the items are of such a nature that they are grouped in the original records, and where you can prove the posting of a thousand entries in one you save time. This method assumes, of course, that there will be a verified trial balance of the customers' ledgers to support the controlling account. The question of accounts which have been collected, but which do not show the collections, will be considered later.

As to footings, one should be a shade more apprehensive than with purchase records. In a large concern prove, say, every eighth

page, and in a small concern, say, every third or fourth page, always including the last and sometimes the next to the last page of each month.

Cash Receipts. In all well-regulated concerns *all* cash receipts are deposited in the bank and all payments, therefore, must be made from the bank account. This almost disposes of the question of checking the footings of the cash book. Where the bank account is proved and the cash receipts and payments are traced into and out of the bank it would seem logical that the footings of the cash book could be automatically proved at the same time. If this does not seem to be a complete verification, in a large business you may consider that, in addition thereto, the proving of every third or fourth page would be a complete check.

The postings of the nominal accounts should usually be verified, not because there is any great danger of fraud lurking therein, but for the purpose of locating any possible posting to a wrong account. For instance, it frequently happens that part of a plant or old machinery may be sold. Sometimes such items are posted to an earning account instead of to a capital or a reserve account. These postings are as a rule few in number and are important enough to be verified *in extenso*.

The postings to the credit of customers should be proved in totals through the controlling accounts. If there is no controlling account and one cannot be constructed readily you should make a fair test of the individual ledger credits, working, of course, from the ledger back to the cash book and not *vice versa*. The reason for this is obvious; if a customer has been credited with an amount which purports to have been posted from the cash book, but which, as a matter of fact, is not entered there at all you would not discover such items by using the cash book as a basis. And it would not be safe to depend on looking through the ledger subsequently to see that all items are ticked. It is sometimes suggested that the chief danger in such practice lies in the possibility that the ledger clerk can, where the work is not finished at a sitting, supply the ledger tick marks himself. There is not much basis for this fear, but it would be foolish to expose oneself to it where no necessity exists.

If it is thought wise to verify the individual postings to the customers' accounts, do not check every one unless some pretty good ground

for suspicion exists. If the audit is a periodical one, say, for six months, cover, say, half the letters of the alphabet only. Six months later cover the other half, or cover one-fourth only each audit and take two years to the entire list. It is not an infrequent fraud wherein ledger credits do not appear as cash debits, but it is hard to imagine one case where a good test would not have disclosed the fraud. You can imagine a man who would confine his peculations to customers whose names commenced with X Y Z only, but surely your imagination is not strong enough to induce you to cover X Y Z every audit. You can afford to take your chances that he will inadvertently tackle an A customer, in which case he would not escape the first time and if he only used one or two letters he would still be caught in a reasonable time.

Cash Payments. The footings if proved with the bank account need not be verified a second time. Many instances have been found where cash book footings have been overstated but in every case a reconciliation of the cash footings with the bank account would have revealed the fraud.

The auditor should insist, wherever feasible, on having *all* payments represented by checks. It reduces the possibility of manipulation of cash book footings to a minimum, and, for this reason alone, is worth all the trouble which may be occasioned by the necessity of depositing all currency receipts. If the footings cannot be proved by the bank account, verify, say, every third or fourth page.

If the cash book is properly columnarized and a controlling account is kept with accounts payable, most of the postings will consist of monthly aggregates, which should be checked to see that they do not get into the wrong ledger account. Here, however, it is important to avoid duplication. In many audits it is desirable to make full analyses of the various expense and purchase accounts for use in the reports. This work should be done at the time of the verification of the postings for it may be found that the details in the ledger are not sufficient and the cash book pages must then be consulted again.

Do not verify the postings to the individual accounts unless some special reason appears. The payments are supposed to be vouched to establish their authenticity and it is not necessary to trace the payment to the debits of the accounts. A controlling account supported by a trial balance of the subsidiary ledger is a good proof, but even

where this is *not* in evidence the checking of the debit postings is usually superfluous.

As against the practice—fairly common—of checking all postings and footings, the above will seem radical. It is not radical if it is approved after full discussion and thought, and if it will stand the additional test of each particular audit. Where the slightest cause for suspicion exists, there must be a more careful study of the situation, but still that does not imply that because there *is* a probability that something is wrong, therefore, the auditor should jump in blindly and tick every entry in the books. Even with a definite knowledge of fraud there is a good argument against the immediate verification of all the arithmetical work in the books.

Other Records. In many lines of business the books of account bear distinctive titles and it may be that these books have not been called by their technical names in the foregoing pages. For instance, in a publishing business you may not find a sales book so called, but you, no doubt, will find a subscription record and an advertising register. With these books, as to footings and postings, proceed about the same as with regulation sales book—as a matter of fact that is exactly what these two records represent—sales of advertising space and sales of copies of the publication for a stated period (subscriptions). It is far more satisfactory to have an illuminating title like this for a book than it is to attempt to cut down the number of account books in use and perhaps journalize every transaction. Aside from the saving of labor to a bookkeeper through the use of books for special purposes is the more important function of being clear to one who does not understand bookkeeping. Most business men are at sea when they try to understand an ordinary journal, but if you label a book *subscription record* or *advertising register* anyone with ordinary intelligence knows exactly what to look for within its pages.

EXAMINATION OF VOUCHERS

Vouchers. Not many years ago one of the principal features of every audit was the inspection and verification of vouchers for cash payments. In many instances certificates stated without reserve that the *accounts have been audited and found to be correct* when as a matter of fact absolutely nothing was done except compare certain

receipts, purporting to represent payments of cash and acknowledgments thereof, with the payment side of the cash book. Look at some of the certificates appearing at the end of treasurers' statements in published reports of charitable and religious institutions and you will find just such a state of affairs.

It seemed conclusive to many people that if a cashier or a treasurer could furnish a voucher for every item of cash disbursement there simply could not be anything wrong about the accounts as a whole. As the science of accounts developed, some auditors were not satisfied with this and they supplemented the examination of the vouchers by a complete verification of the footings and postings. Having done this they were content and felt that great strides had been made in the art. Add to the above the checking of the trial balance and you will have the full program of a large percentage of audits as worked out very many years ago. Sorry to relate, a very considerable number of present day audits vary little from this procedure in spite of the fact that professional auditors now have an opportunity to profit by the mistakes of their predecessors and to apply more scientific rules to their work. Some auditors, however, do all their thinking after they start to work, and will not take the time and trouble to plan ahead.

An estimate can be made of the number of defalcations out of one thousand which would have been discovered by a verification of the vouchers, footings, postings, and trial balances: certainly not 50% and probably not 30%. But, it will be said, if 30% or more of defalcations would be disclosed by an examination along the lines described, would this not prove not only the value but the necessity of such work? Of course it would, but speaking relatively—which is more important, the work which would disclose 70% of fraud or the routine which would disclose but 30%? Granted that the former is the more important, the point is proved that an auditor must at all times study and think, and that he must appreciate the need of preparing all his plans on a *relative* scale. Conceding the obvious conclusion that no audit can or should embrace a complete duplication of all the transactions of the period under review, then the cutting out process must proceed along the lines of *greatest* resistance, and the points covered will then coincide with the weak spots.

Coming back to vouchers, it must be admitted that their examination is necessary and valuable, but with respect to *relative* importance,

such work will be classified down towards the end of the list. If a careful comparison of vouchers with cash books would disclose improper or extravagant purchases or expenses it would raise the value, but unfortunately the ordinary voucher, so called, is usually little more than a receipt for a given sum of money and is usually of so little practical use that many concerns never insist on them nor do they preserve them when they are furnished.

If a check bears on its face or back any indication of its purpose it is the best receipt for money paid that can be secured; if it bears no evidence as to its purpose, but if it can be readily identified with a particular bill or invoice it still is a better voucher than a receipted bill. The comparison of vouchers with a cash book without the identification of the entries in the cash book with the checks is worse than negligence, for the sole purpose of vouching cash is to ascertain, as nearly as possible, that the payments represent an equivalent in value to the payors, and that the equivalent—that is the discharge of a like liability—is received when the cash is paid. A mere receipt for so much money, which can readily be forged, is poor evidence of a legitimate payment, but a paid check, properly endorsed and otherwise identified as representing a definite liability is pretty fair proof that the money has reached a creditor; follow this up with a careful scrutiny of the documents supporting the check and you will be on the right track.

An auditor can be of great assistance to his client by looking into the various operations surrounding a payment as well as passing on the question as to whether or not it is a *bonâ fide* transaction. The bill or invoice being paid, if representing a purchase, should bear on its face all the proper marks or initials to indicate that the goods or materials were received in proper order as to quality and quantity; that they were as ordered, which includes an approval of the price, provided it was recorded at the time the order was given, or an approval by a responsible official where the price was not fixed in advance; that if the quotation was *delivery free* freight is not paid or, if paid, has been charged back to the vendor; that in all other respects the purchase was in order including the checking of the calculations, the notations as to the department or account to be charged, etc. Where such a system is in force it will not be necessary to inspect every bill; a complete test should be made to see that there is a strict compliance

with the rule, but this test will be complete by taking, say, three or four months out of twelve and examining each item, always including the last month of the period. You should then look over the cash book very carefully for the other eight or nine months and in connection with your analysis of the ledger accounts you can note any unusual or suspicious looking item and call for the voucher covering it; this will obviate the necessity of checking over the great mass of documents which you have satisfied yourself by your general test to be for the proper and ordinary purposes of your client. The analysis of the ledger accounts is important wherever charges have been made to plant accounts, and these, of course, must always be supported by proper vouchers.

Vouchers for Petty Cash Payments, Pay-Roll, Etc. Where payments are made covering expenses and wages, and for similar purposes, and where there is no ledger account with the payee, great care must be taken to ascertain that the amounts have not been overstated, either by fraudulently raising the figures on the bill or memorandum or by entering a larger amount in the cash book than the voucher represents.

Taking up the question of wages, it is a well-known fact that receipts are worthless so far as they serve as a check on the amount paid. It may be valuable to a concern to have a receipt from each man to guard against subsequent disputes, but these receipts are of little real value to an auditor who is attempting to prove to his own satisfaction that the aggregate amounts of the pay-roll payments have reached the hands of those entitled thereto. You can think this out for yourselves with the one suggestion that the best check on wages' payments is to use as many people as possible during the various stages from the point where the time is recorded to the final handing out of the envelopes. If the latter, for instance, is done by an employe who has no access to the rolls nor to the cash, it makes a good check. If an auditor is on hand when the men are being paid off he should supervise the operation or take a more active part if feasible. Obviously, this procedure would be of no value unless it was done without notice to *anyone*.

Petty cash vouchers are often altered, and petty cash payments are frequently the subject of manipulation. Junior clerks see how easy it is to hand in a memorandum calling for \$10.00 postage when

\$5 00 is all that is necessary, or in fact used, and they gradually extend their field of operation until considerable sums are abstracted in various ways. Postage or mail books are in general use in England and if more generally adopted here would save many a boy from the penitentiary. It is a grave responsibility for any employer to permit, or any auditor to approve, a loose or inefficient system for handling petty cash, postage, etc.

It is not generally known that a large percentage of young boys who are employed throughout the business districts of our large cities and who have access to or can draw from petty cash funds, are constantly following the races through the worthless afternoon papers or through pool rooms and in other ways. Some of the conversations which take place in large offices indicate the keenest interest in the results of the races not only near New York, but throughout the country.

Professional auditors should take a firm stand on all questions, public or private, which affect gambling. An auditor who countenances gambling is violating the unwritten code of ethics of the profession just as flagrantly as would a physician who encouraged his patients to use poisons or drugs in the hope of working up more business.

Coming back to petty cash vouchers—in view of the informality of so many of them, the auditor's best protection is to have some responsible person scrutinize the payments, rather than the vouchers themselves, and indicate his approval by initialing each page or each month of the petty cash book. The whole question of vouchers is one which calls for the exercise of good judgment rather than the application of fixed rules, and you should take this view of it rather than to feel that it is merely a matter of comparing pieces of paper with certain entries on the payment side of a cash book.

There is, of course, no great objection to examining every voucher where the concern is not too large, and where you have plenty of time, and where you do it right; but you should relegate the inspection of vouchers to its proper place, and if you are pressed for time attend first to more important matters.

THE TRIAL BALANCE

One of the most important matters in any audit is the verification of the trial balance. By this is not meant the routine checking of the

ledger footings and extraction of the balances merely to test its arithmetical accuracy, but that careful examination or study of it which will throw light on the entire and detailed working of the whole system. Every ledger caption should mean something. After some experience an auditor by simply looking at the various accounts scheduled on the trial balance will be able to discuss the whole system and without further data suggest improvements therein. Of course no sane practitioner would commit himself after such a cursory glance, but he will have gained sufficient insight into the affairs of his client to suggest the next and succeeding steps in the audit. Do not spend too much time on trifling errors in a trial balance, but take enough time to satisfy yourself that the trial balance honestly represents the face of the ledgers and that it may be relied on as a basis for report or balance sheet.

Having once secured a trial balance that he knows has not been tampered with, the auditor may cease to trouble himself about the materials from which it was built up—they may be manipulated and altered up and down, but he holds in his own hand the key of the whole position. Nor need the course indicated cause offense, or even excite suspicion, if carried out with tact. It is generally an easy matter to hang on to a list of balances, and, even where this cannot be accomplished unostentatiously, a few notes and private marks will often serve the purpose. It is not a difficult matter to acquire a *tick* which, while looking much the same as any other, can be instantly distinguished from a forgery. A man forging ticks will be much less careful as to their form than a man forging initials, and can thus be more often detected. It is not a bad plan to carry about one's own colored ink, and to take care that it is a different make from that in general use at the offices where the audit is conducted. The auditor, however, must be careful not to talk about these things; and he should also be careful not to leave his ink about. It is often a great advantage to employ ink of a different color from that used at the preceding audit.

In the foregoing paragraph it has been assumed that an exact balance has been arrived at by the bookkeepers before the auditor commences his investigation. This, of course, is as it should be, for clearly it is no part of the auditor's duties (as such) to balance the books. The question arises, however, as to whether an auditor is

ever justified in passing accounts that do not exactly balance. Obviously, accounts that do not balance cannot, in the nature of things, be entirely accurate; but so long as the auditor is satisfied that the discrepancy arises from one error, and not from the combined effect of numerous errors, and so long as the difference is so small as to have no practical effect upon the ultimate result, the absence of an accurate balance may sometimes be disregarded. Here, as elsewhere, however, much depends upon circumstances; a *nominal* or *private* ledger—or indeed, any ledger with less than, say 500 accounts—ought certainly to balance exactly; on the other hand, it may be impracticable to insist on an absolute balance with a large *individual* ledger—hence the importance of these balances being tested at frequent intervals, say, monthly at least.

VERIFICATION OF INCOME

It is not often advisable to make statements which cannot be supported by facts, and it is obvious that a dependable analysis of frauds will never be compiled from accurate data, but an estimate prepared from long experience supports the assertion that nearly, if not quite, 75% of defalcations and frauds are connected directly with a failure to account for income or cash receipts, and less than 25% with methods of improperly diverting cash after it has found its way into the treasury.

Here will be discussed, as of the more importance, the 75% division. This, in turn, can be divided into two groups; the first is made up of that class of frauds which consist in a failure to enter in the books, or at least in the books which form a part of the double entry system, any record whatever of the sale or delivery of goods or materials; the second class includes those cases where there is a record of the original sale or delivery, but where the subsequent collection is omitted entirely or where the entry of collection is postponed until a later date. Obviously, the former methods will be the ones most easily concealed and the auditor must, therefore, be especially vigilant in this part of the audit. When the audit is completed one should be able to certify that in his opinion all revenue or earnings have been properly accounted for. This does not mean that the cash which was duly entered in the cash book and the sales

which were in due course entered in the sales records were assumed by you to be *all* the cash receipts and *all* the sales, without further investigation.

It is very important to ascertain that all cash sales are accounted for. In nearly every business some sales are collected for at once and are not passed through the customers' ledgers. Do not allow the fact that the general ledger shows very few such transactions, to influence you unless you have made inquiry from some one other than the cashier. One instance may be cited where the auditor found that there were practically no cash sales accounted for; he inquired as to this and was informed that it was not the custom to make such sales; further investigation, however, developed the fact that the cash sales had been quite large, but that his first informant had pocketed the whole proceeds. In this case a rough memorandum was discovered which enabled him to locate the entire shortage, and it will be found the rule rather than the exception to find some sort of record which can be compared with the cash book. The formal original records, which are nicely written up and which agree exactly with the other books are not the ones you want. If you can find the first *originals* in rough form, perhaps, and very dirty and almost illegible, there is no doubt about the advisability of using such records in preference to the fair copies, because the latter are frequently written up by the same men who write up the final cash records, and when you know that professional auditors testify that original records corresponding closely to the above description have revealed to them perhaps more instances of fraud than any other source, you will understand the importance placed upon it.

Included in the latter statement are the original records of sales and the original records of shipments. You rarely find that order books or shipment or delivery books are considered among the formal books of account, and it is perhaps fortunate for the auditor that this is so, because in many cases where the examination of these records has revealed fraud, there has been great astonishment and usually indignation that an auditor should ask to see *memorandum* books. If the defaulters in most of these cases had suspected that the books mentioned would be called for they could readily have been destroyed or altered before examination.

Wherever possible, therefore, secure the order books and compare

some of them with the ledgers to see that the orders were filled. If not, find out why not. It may be that through carelessness an order was not filled and that it was not reported. Here is a good chance to be of positive value to your client.

Orders may have been filled and the proceeds collected and not accounted for. This should be discovered by comparing the shipping or delivery books with the sales records. Fair tests here are all that are necessary because any system of fraud involving the above methods has been, in practically all known cases, continuous, so that a complete comparison for a few weeks or a month would cover the point quite as well as a more exhaustive comparison.

A fruitful source, which you should not overlook in your effort to ascertain whether or not all the income has been accounted for, is the balance sheet—or the trial balance after closing, which may state the various items of assets in greater detail than the balance sheet. Give each item proper thought to determine the possibility of the income therefrom being omitted from the books. Take, for instance, a mining company where the balance sheet shows that it owns workmen's houses. You will then have to find out if all of the rents of *all* the houses have been accounted for. Furthermore, where there are tenants you will usually find sales of coal and other fuel and all sorts of supplies. If you do not find any record of such sales inquire from some one *higher up* why. Don't take the cashier's word for it.

Another instance is a firm or corporation which has invested part of its surplus in bonds or stocks or some other outside investment. See to it that all income which should have been accounted for has found its way into bank.

These are merely suggestive and serve to illustrate the idea that you must not use the receipt side of the cash book as a basis for verifying the actual income or receipts. Work from every outside interest you can find *to* the cash book and you will then be reasonably safe.

There is not the same difficulty with the cases where there has been some record in one of the original books of account of a sale, the subsequent collection of which has not been accounted for, or where the sales have been debited in due course to customers, but the collections have not been credited.

of the sales records, and the proof of the postings of same to the customers' ledgers. This has been fully covered.

The instances where credits have been arbitrarily made to customers' accounts, but without corresponding entry in the cash book, have also been covered.

You now come to what is believed to be the most prolific source of fraud practiced, viz, the failure to enter in any book, collections from customers. The detection of such fraud is difficult and it will pay, therefore, to devote considerable time and space to the subject.

The most common practice can be illustrated as follows:

Customer *A* on January 2d pays \$112.53, say, by check; the cashier fails to enter the collection in his books. If he has made other collections in currency exceeding \$112.53, he will deposit the check and take the equivalent in currency from the drawer, thus obviating the necessity of forging the endorsement and having the check cashed, although the latter method is more common than is generally supposed. In the first case the fraud might be discovered by comparing the details of the cash receipts with the details of the bank deposits as listed in the check stubs or copybooks, but this record is not always available and auditors frequently find that where such a fraudulent practice exists the record of the bank deposit has been altered or made up to correspond with the cash book which makes the comparison of no value.

In most cases it is not considered safe to hold out collections too long for fear some one in the office will discover that customer *A* has not paid and go after him. The cashier, therefore, on January 31st, decides that it will not be wise to hold up *A*'s credit any longer, and accordingly credits him with \$112.53 in the cash book and the amount finds its way to the ledger in due course. By this time the cashier is further in trouble and customer *B*, having on this day (31st of January) paid \$250.00, also in check, he fails to enter the amount and thus creates a cash *over* of \$137.47, which he removes from the cash drawer as soon as he can accumulate that amount of currency.

Here again may be urged the importance of recommending to your clients the daily deposit of all receipts — currency and checks — and there will be far less opportunity for fraud afforded to a clerk dishonestly inclined.

And so it continues—he must soon credit *B* with \$250.00 and he therefore calls on *C*, or by this time *A* may have paid again. In all cases it will be found that the amount grows larger and larger until in many cases the discovery is forced without the aid of an outside auditor. In more cases, however, it goes on for years and unfortunately more than once such a practice has been in full force during, prior, and subsequent to, periodical audits by public accountants.

The best way to detect such a defalcation is for the auditor to send out statements to all customers, requesting them to confirm the accuracy of the balances on a blank enclosed for the purpose, which, in turn, is returned direct to the auditor's office. This is the practice followed by many leading auditors and where the client does not or will not consent to such a course you should put the responsibility for the integrity of the customers' balances squarely up to him. Every year the objections to this practice grow less and no doubt within a very few years the verification of customers' outstanding balances by correspondence will be the rule rather than the exception.

It has been found that this independent check is of value not only in the disclosure of fraud but also in the insight which it gives to the condition of the accounts with respect to unadjusted items, allowances, etc. It is needless to say that some bookkeepers are careless and others lazy, and where this exists it is important for the auditor to find it out. In all classes of business various claims and errors crop out from time to time; where these affect customers' accounts, adjusting entries should be made at once, otherwise the outstanding balances do not reflect the true state of the accounts. If a bookkeeper *is* lazy or careless it will soon develop in the replies from customers to the requests for confirmations. In several instances this inquiry has demonstrated a very unsatisfactory condition where the cause was carelessness and not fraud. In many instances, however, carelessness leads to fraud and so where you can check loose methods you may really be preventing fraud, and the auditor who prevents fraud is a very useful person.

It is, of course, impossible in a limited space to suggest more than a bare outline of the procedure to be followed in ascertaining that all income has been accounted for.

The very nature of a business will suggest to an intelligent auditor practically every source of revenue, special and ordinary. For

instance in the audit of a land or real estate company it would at once occur to the auditor that he must look carefully for receipts from sales of building lots. Now the last places to look are the receipt side of the cash book and the sales book or other record of the sales, although when you ask for a record of sales, that is the point to which you will be directed and in at least nine out of ten times, the client will expect you to take these records as starting points rather than to expect you to consider such a record as a goal *to* which you are working.

There probably never has been a land company which did not issue a map of its property nicely marked off into lots with a number and block for every lot. What could be simpler than for the auditor to take a map and one of the printed price lists usually available and proceed to account for every lot on the map. All lots sold for less than list price should pass inspection by a duly authorized officer. All lots not accounted for as sold should be on the *for sale* list or else specified as being set apart for particular purposes; these purposes to be evidenced by resolutions of the board of directors or other authority properly expressed.

As most lots are sold on installments the auditor will immediately resolve to look for collections of interest on the deferred installments and will require that every item be accounted for.

And so through the rather simple processes of most business enterprises it will be possible to *think* out the sources of revenue instead of using the books as a guide; by so doing you will avoid the danger of being influenced by the entries which are shown therein and thus lose sight of the fact that those entries are not all which *should* appear.

THE BALANCE SHEET

The Audit of the Balance Sheet. That part of an audit has been covered which embraces the verification of income and expenses, together with the proper tests of postings, footings, and trial balances. The balance sheet has now to be considered and the best and most comprehensive manner of satisfying ourselves that it represents the true financial position of any given firm or corporation at a specified date, discussed.

The ground already covered is the most important from the standpoint of our clients and their relations to their employes, while

the question of the accuracy or inaccuracy of a balance sheet affects proprietors—whether partners or stockholders—also the public whenever the balance sheet is submitted to a creditor, a bank, or a prospective purchaser, or as a basis of purchase or sale from one partner to another.

The auditor must determine for himself, based on the circumstances of each particular case, whether or not an audit directed principally to transactions prior to and leading up to a balance sheet will be of equal or greater value to his client than an audit which very largely takes for granted the integrity of the current operations and in which the chief interest devolves upon the assets and liabilities—do they or do they not correctly represent the true financial position at a certain date. The latter is a balance sheet audit so-called. Where there is an auditing department properly conducted, or where the purpose of the investigation is to determine the net worth of the concern, it is perfectly good practice to devote oneself almost entirely to the items of the balance sheet. For instance, if a man wishes to borrow money from a bank, the bank official is more interested to know as nearly as possible the man's capital than he is interested with respect to the internal conduct of the business during the last fiscal period.

The Vice-President of one of the largest commercial banks in New York, in an address before the American Bankers' Association a few years ago, strongly recommended that all banks should insist on each borrower submitting, with his application for a loan, a balance sheet certified to by a certified public accountant. This practice is growing but slowly, because the competition among banks has been so strong that many bankers who personally favor such a requirement have been afraid to insist on it. In view of recent developments, however, we may expect sounder conditions to prevail in banking circles and, in time, the borrower who is *not* required to submit a certified statement will be suspicious of his bank, and will want to change over to an institution where modern methods prevail. If you are called upon, therefore, by a bank for the purpose of verifying a customer's statement, do not express surprise at the engagement. It is, or should be, needless to say that an audit for such a purpose is *not* a detailed audit; it is not even an audit where comprehensive tests can be made to ascertain that income has been accounted for and

expenses vouched, but it is to be directed solely to an inquiry as to how nearly correct the signed statement, submitted to the bank, may be.

You must not neglect to consider the possibility that the examination might justify a certificate that the capital investment claimed was not excessive, while at the same time a defalcation was going on which in time might become serious enough to wreck the concern. Under such circumstances the auditor would not be subject to any legal liability unless the examination of assets and liabilities if properly conducted would have disclosed the fraud; but it is a serious question as to whether or not he would be held morally responsible with a consequent loss of prestige. It must be borne in mind, however, that a careful checking of a balance sheet will often reveal manipulation of the accounts even though the balance sheet is not affected, and a careful auditor will not omit to make such tests as may be practicable. For instance, it is often desirable to assure yourself that the outstanding customers' accounts are genuine and represent *bonâ fide* sales; where no audit of the books is made this is of special importance so that it may be considered desirable to prove the postings of, say, the last half month or so—the debits as well as the credits.

In the following remarks it will be assumed that the rules with respect to the audit of income and expenses have been fully complied with and that, the preliminary work having been completed, the verification of the assets and liabilities is in order.

The verification of balance sheet items usually follows the order outlined below:

Cash	Notes payable
Notes receivable	Accounts payable
Accounts receivable	Contingent liabilities
Securities	Accrued liabilities
Inventories	Bonded and mortgage debt
Fixed property	Capital stock
Deferred charges to operations	Surplus

Verification of Assets. An untrained auditor should inspect physically *all* assets, otherwise he may be deceived; but an auditor with the requisite training and experience will find that many assets are susceptible of actual verification without the physical scrutiny otherwise required.

AUDITING

PART II

AUDIT REPORTS AND CERTIFICATES

No audit is really finished until the audit report has been prepared and presented to the client. Many an excellent piece of work fails to satisfy the client on account of a poorly written report. While it is true that the efficiency of an auditor should not be judged entirely upon the basis of his written report, it is nevertheless often true that this is the only tangible result of the work that the client attempts to understand. Hence it may be said with some degree of accuracy that the value of the audit, so far as the client is concerned, often "stands or falls" on the basis of the written report.

Promptness. There should be no unnecessary delay in the completion of the engagement, and the report should be presented as soon as possible thereafter. Even the most complete and interesting report loses part of its value with the passage of time. The client is not particularly pleased to discover in April that on the preceding December 31 his financial condition was only fair, that profits for the preceding year were overstated by his regular accounting staff, and that steps should be taken *immediately* to better conditions. If the client's accounting staff is accustomed to present results of operations within a few days of the end of the accounting period, there is no good reason why the auditor cannot complete his work soon enough thereafter to be of some real value to his client.

Where the Report Should be Prepared. There is some dispute as to where an audit report should be prepared. Most auditors would prefer to do the work in the privacy of their own offices, where they would not be bothered by the client's staff. When it is possible to secure all of the information necessary for the report before leaving the engagement and if the auditor is reasonably sure that he will not wish to confer with the client on doubtful points that have not been

fully settled, this method of procedure may be advisable. However, the better practice is to prepare at least the preliminary draft of the report before leaving the offices of the client. This gives the auditor an opportunity to settle doubtful issues and to offer constructive criticism as he proceeds with the report. It eliminates any possibility of a return trip for additional information that should have been secured earlier—a proceeding very embarrassing to the auditor and displeasing to the client.

Incidentally, it is well worth while to leave a favorable last impression on the client and his staff by turning over all books and papers of the client in good order. A comment of appreciation for the cooperation of the client's staff is not amiss.

Diction. Perhaps the most essential item of qualification with respect to the preparation of the auditor's report is the ability to write good straight-forward English, to prepare reports which serve useful purposes, and to omit all redundant matter. The report is for the edification of the client and of others to whom it may be presented; if it is not interesting enough for them to read, the auditor is to blame. The most successful auditor keeps on improving in this respect until clients are glad to get his reports and read them.

The client is usually not a trained accountant. The report must be prepared in such a manner that he, as well as other laymen, can understand it. The auditor must avoid extremely technical reports.

It has been said that accounts are the language in which business transactions are written. The auditor, then, through the medium of his reports, must indicate that this language is simple and easily understood. A true report is not necessarily a good report, unless the truth is evident to the average reader of that report.

Recently an auditor prepared for his client a very elaborate report, which the client presented to his banker for credit purposes. The auditor was called in by the banker for consultation. After a moment of uncertainty the banker exploded this bombshell: "Well, this is a very nice report, but what I want to know is this, did Mr. X make any money last year?"

What Is an Audit Report? An audit report, according to the most commonly accepted use of the term, is described as comprehending everything formally submitted to a client as a result of an

audit engagement. Such a definition excludes, of course, the working papers used in the preparation of the report, and retained by the auditor for his own files. It includes, however, all statements, schedules, comments, and the certificate, whether or not all of these items appear specifically over the signature of the auditor.

Although the working papers are not a part of the final auditor's report, their importance should not be minimized. Indeed, the first step in the writing of the final report must of necessity be a thorough examination, revision and correction, perhaps, and a final arrangement of the working papers. This part of the work is often performed by the principal of the auditor who performed the actual work of the audit. This is an essential part of the preparation of a good audit report.

Character of Engagement Determines Scope of Report. The purpose and scope of the audit, and the intended use of the auditor's report, largely determine the general outline and content of that report. For example, an audit of the asset and liability accounts as of a given date (a balance sheet audit) for credit purposes would necessitate that the report rendered include a balance sheet—perhaps in comparative form—with the necessary supporting schedules and comments, probably with a certificate appended; in addition, a statement of profit and loss for the period might be shown, but not certified. A detailed audit of a certain period would require that all of the above be included in the report, and the statement of profit and loss for the period must be supported by detailed schedules and comments and be certified.

On the other hand, if the auditor is engaged to examine only specific accounts, or if there are other restrictions on the scope of the engagement, the resulting report may be much less complete; the necessities of this latter case may be met by a letter or other informal report. In such a restricted engagement, care must be taken to indicate in the report by precise scope of the audit and the responsibilities assumed by the auditor in rendering the report. A report should be a truthful narrative of facts which will be of value to those to whom it is addressed, and the conclusions therein should be founded solely on the auditor's investigations.

Content and Arrangement of Report. As indicated earlier in this discussion, the character of the report rendered will depend on

the nature of the engagement, which may comprise a complete or detailed audit, a balance sheet audit, an investigation or audit of particular accounts, such as a cash audit or a cost audit. The outline presented below applies particularly to the report resulting from an engagement to make a complete or detailed audit. In an engagement of a more restricted type, only parts of this complete report would be submitted.

The contents and arrangement of such a report on a complete or detailed audit might well be as follows:

- (1) Letter of Submittal.
- (2) Certificate of Audit.
- (3) Comments on the Audit and on the Statements.
- (4) The Balance Sheet, supported by the necessary Schedules in as much detail as desirable for practicable use.
- (5) The Statement of Profit and Loss, divided into sections, and supported by such Schedules as required.
- (6) The Statement of Cost of Goods Manufactured, and Schedules (for a manufacturing business only).
- (7) Statement of Surplus.
- (8) Special Schedules, such as, Statement of Application of Funds, or Statement of Cash Receipts and Disbursements.
- (9) Graphs and Charts, where necessary or desirable.

Letter of Submittal. As indicated by the title, this is merely a letter typed on the business stationery of the auditor, presenting the report to the client. It may contain an index of the contents of the report, though this index may be on a separate page.

Certificate of Audit. The certificate has been placed early in the report described here, though this is by no means a universal practice. It is largely a matter of personal preference and may occur towards the end of the report. In a balance sheet audit, where only the balance sheet is certified, the certificate may well appear just after, or as a part of the balance sheet.

The shortest form of certificate is probably in most cases the best. Since it is a part of a complete report, and is to be used only in connection with that report, such qualifications and limitations as may be necessary to protect the auditor are best put in the comments and reference made to them in the text of the certificate. The following is a possible short form of a certificate to be inserted as a part of the report following a detailed audit.

Blank & Company

Certificate of Audit

We have audited the accounts of Blank & Company, for the year ended December 31, 19. . . . , and we certify that the herein submitted Balance Sheet and Statement of Profit and Loss are correct and in our opinion, subject to the accompanying comments, reflect the true financial condition of the business at December 31, 19. . . . , and the true operating results for the year ended at that date.

X, Y, & Z.

Certified Public Accountants.

Chicago, Ill.

January 28, 19.

If there are limitations which are important, and which may be overlooked if put in the comments, it may be well to include these in the text of the certificate. They may be of a positive character, indicating what work has been done; or they may be of a negative character, indicating what has not been done. The auditor may find it necessary to include a statement of these limitations in the certificate itself in order to guard against the possibility of the unauthorized use of the statements and certificate apart from the qualifying comments.

Comments. According to one author, comments in an audit report may serve some of the following purposes:

- (1) To emphasize certain matters which might be overlooked by a hasty reading of the statements.
- (2) To permit the statements to be prepared in form both clear and brief; sundry explanations which are dropped from the statements remain available elsewhere in the report for the client.
- (3) To permit details to be presented relative to an item where they are not deemed sufficient in number to require the making of a schedule.
- (4) To acquaint the reader with exactly what the auditor has done and what he has *not* done in his verification of certain audit matters.
- (5) To criticize tactfully and constructively.
- (6) To suggest changes which will eliminate a cause for criticism.
- (7) To recommend certain accounting procedures for adoption, providing such recommendation is desired by the client.*

Whether these comments occupy several pages or only a part of a page, they should be arranged in the same order as the items on the statements to which they refer. Comments should not be made too freely but only when they serve a useful purpose. They should

*"Auditing" by George E. Bennet. Published by The Macmillan Company.

be written in a manner which will not offend and in a simple and direct style that can be understood by all readers. Undue verbosity will cause the reader of the report to lose interest, and he may then fail to grasp comments that are of real value to him. Personal references should be avoided where possible; individuals in the client's organization should be referred to by title rather than by name, as "the cashier," rather than "Mr. Jones."

The Balance Sheet. This statement may of course be prepared in one of a variety of forms, but it should be designed to fit the needs of the case in question. The "master" balance sheet may often be in condensed form, very brief, presenting only summary totals; but if this condensed form is used, it should be supplemented by as many schedules as are necessary to give a complete picture of the financial condition of the business. Schedules which serve no useful purpose should be omitted. This type of statement makes it possible for the client, or other readers of the report, to get very quickly the essential facts about the financial condition of the business, and to refer to such schedules for such further detailed information as particularly interests them.

Even the balance sheet itself should be constructed in such a way that totals and sub-totals of groups of items "stand out" clearly, so that a few minutes' study gives a summary view of the information presented, the details to be supplied by a further study of particular sections of the balance sheet or of the appended schedules.

The balance sheet is often listed on the report as "Exhibit A," and the supporting schedules as "Exhibit A—Schedule 1," "Exhibit A—Schedule 2," etc.

The Statement of Profit and Loss. As in the case of the balance sheet, this statement of profit and loss should be in summary form and supported by the necessary schedules giving detailed information. The minimum of information appearing on the "master" statement should probably include sales, cost of goods sold, gross profit, totals of classes of expenses and net profit. This type of statement makes it necessary to prepare a separate schedule of the cost of goods sold and a schedule of each class of expense, etc. The reader of this statement can get from the master statement a bird's-eye view of the operating results of the period, and can then secure the details in which he is interested by reference to schedules. This statement is

very often listed in the report as "Exhibit B," and the supporting schedules as "Exhibit B—Schedule 1," etc.

Cross Reference—Exhibits and Schedules. To render most intelligible these summary "master" statements and schedules, it is necessary to have a very complete system of cross indexing, so that reference from the "master" statements to the schedules, or *vice versa*, is plainly indicated. A client does not wish to get lost in a maze of cross references—it resembles too much an attempt to read the Treasury Regulations on the Income Tax Law.

Statement of Cost of Goods Manufactured. In the audit of a manufacturing business, the accounts relating to the cost of manufacture are so numerous and so important that it is usually desirable to prepare a separate statement for manufacturing operations. This statement may be known as "Exhibit C" and be supported by schedules, or it may appear as a schedule supporting the statement of profit and loss. The extent and complexity of the manufacturing operations determine this point.

Statement of Surplus. It is a well-known fact in accounting that it is desirable to have a method of checking the statement of profit and loss with the balance sheet, that the net profit (or loss), as shown by the first-named statement, may be checked with the increase (or decrease) in net worth, as shown by a balance sheet or a series of balance sheets.

But this check is possible only when there have been no changes in proprietorship which are not given effect on the statement of profit and loss. In a very simple case this situation may exist but in most cases where an audit is desired, there will be found some, perhaps many transactions during this period that affect proprietorship but which are not a part of the regular operations of the period and have no place on a statement of profit and loss for the period. The effect of these transactions must be summarized on another statement which may be called a Statement of Proprietorship or, for a corporation, a Statement of Surplus. This statement varies in form, but commonly shown adjustments of the original book balance, sundry additions and/or deductions, the net profit or loss, and the final balance at the end of the period.

An outline of a typical Statement of Surplus for a corporation appears on the following page.

AUDITING

Blank & Company

Statement of Surplus

For the year ended December 31, 19....

Surplus as per books, 19....			\$50,000
Adjustments of profits of previous year			
Deductions:			
Adjustment of 19.... depreciation.....	\$ 1,000		
Additions:			
Adjustment of 19.... income tax.....		500	500
Corrected Surplus, January 1, 19....			\$49,500
Additions during 19....			
Net Profit, (St. of P. & L.).....	\$10,000		
Deductions during 19....			
Fire Loss.....	\$2,000		
Dividends Paid.....	4,000	6,000	4,000
Surplus as per books, December 31, 19....			<u>\$53,500</u>

Statement of Application of Funds. In many cases the statements, which were described above, fail to explain to the client one item of information in which he is vitally interested, namely, changes in his *cash position*. His profits may have been large and still he is pressed for funds, or he may have suffered losses and yet be in a strong cash position. Stockholders may be clamoring for dividends because of a favorable earnings record, neglecting to note that these earnings have been reinvested in assets other than cash, or used to reduce liabilities.

To make these complex relationships clear and to explain just what has happened with reference to the cash position it is well to present as a part of the formal report still another statement, commonly known as a Statement of Application of Funds. This statement may appear as an exhibit, or it may appear as a supporting schedule since its principal basis is the comparative balance sheet. The illustration below will show the form of the statement and will indicate its possible uses. The usual form shows changes in working capital on a separate schedule supporting the main statement, as in the illustration given. It is possible, of course, to show all changes, including changes in working capital, in a single statement, but the method illustrated is usually preferred because of its greater clearness.

Blank & Company
 Statement of Application of Funds
 For the year ended December 31, 19....

Funds Provided:

By Net Profits:

Net Income per books.....	\$50,000	
Add back depreciation—a charge against profits not requiring funds.....	5,000	\$ 55,000

By issue of bonds.....		25,000
By issue of additional capital stock.....		20,000
By decrease in fixed assets—machinery.....		5,000

Total Funds Provided..... \$105,000

Funds Applied

To Increase Fixed Assets:

Land.....	\$10,000	
Building.....	38,000	48,000

To decrease mortgage.....		15,000
To payment of dividends.....		30,000
To increase working capital (see schedule).....		12,000

Total Funds Applied..... \$105,000

Blank & Company
 Schedule of Changes in Working Capital
 For the year ended December 31, 19....

Increases in Working Capital

Increases in Current Assets

Cash.....	\$ 5,000	
Merchandise Inventory.....	10,000	
Prepaid Expenses.....	1,000	\$16,000

Decreases in Current Liabilities

Notes Payable.....	3,500	
Accrued Wages.....	500	4,000

Total Increases in Working Capital..... \$20,000

Decreases in Working Capital

Decreases in Current Assets

Accounts Receivable.....	2,000	
Notes Receivable.....	3,000	5,000

Increases in Current Liabilities

Accounts Payable.....	2,500	
Accrued Taxes.....	500	3,000

Total Decreases in Working Capital..... 8,000

Net Increase in Working Capital..... \$12,000

Graphic Charts. A client who is unused to working with figures or to thinking in terms of them may experience considerable difficulty in getting the full meaning of the conventional form of accounting statement. For his assistance, it is often wise to set up some of the more important features of the audit report in the form of graphic charts and to include them in the audit report. It has been found that such illustrations present comparisons and trends in a way much more likely to give accurate impressions to a reader not possessing an accounting training. Also, a chart may bring to light points and

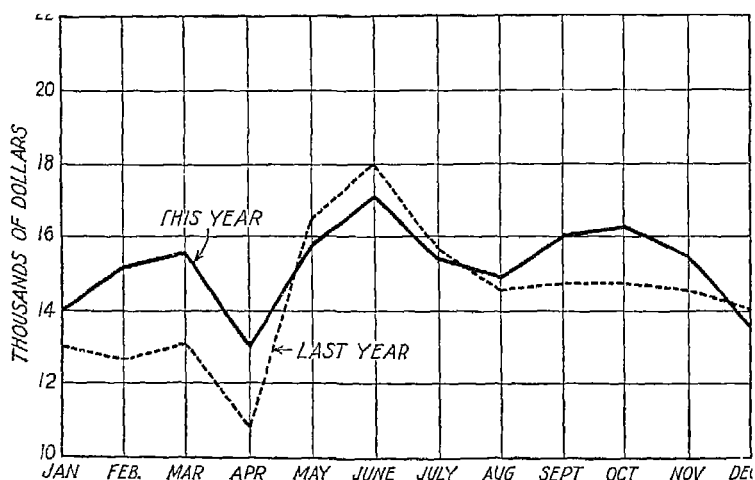


Fig. 1. Curve and Broken Line Chart

facts not otherwise apparent in the report. The auditor should, however, be governed by the client's interest in this mode of presentation.

Charts should be neatly, accurately, and simply constructed. Irrelevant material should be excluded. A scale should usually be given to assist in the interpretation of the figure.

There are probably three types of charts which can be profitably used by the auditor, viz.: the curve or broken-line type, Fig. 1, the bar or column type, Fig. 2, and the circle type, Fig. 3. Of these three the curve or broken-line type is perhaps the most valuable for purposes of an audit report. Applications shown in Figs. 2 and 3 illustrate common methods of charting special types of data.

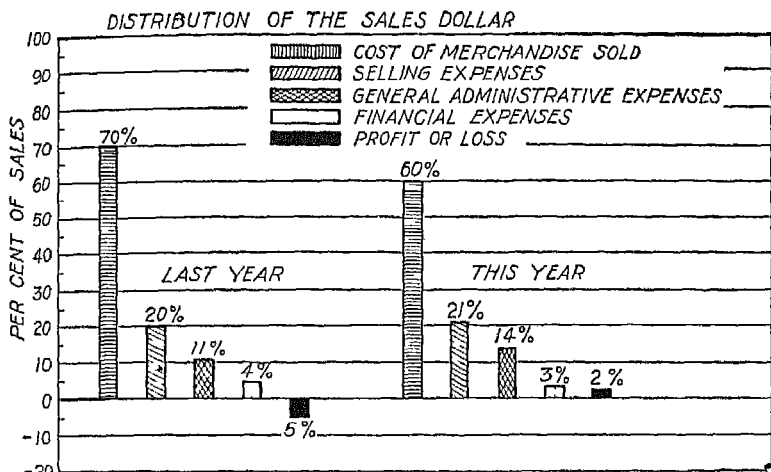


Fig 2 Typical Application of Column or Bar Chart

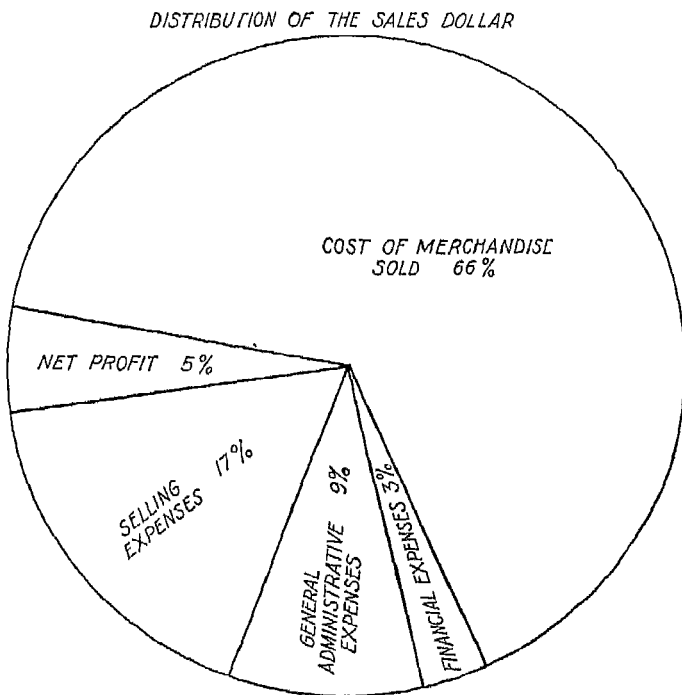


Fig 3. Common Use of Circle Chart

LEGAL RESPONSIBILITIES OF AN AUDITOR

For many years the legal responsibility of an auditor for the accuracy of the figures appearing on his certified statements was very uncertain, especially in this country. Today there is still a degree of uncertainty, but there are numerous English cases and a few American cases upon which to base an opinion. In early decisions, and to some extent today, the American courts have looked to English cases as affording valuable guides to the principles of law to be applied.

A review of the English and the American decisions on this point, and the principles of Common Law applicable, yield these general principles:

(1) An auditor holds himself out as skilled in a profession; hence he is charged with a higher degree of responsibility than one who does not do professional work. If the exercise of reasonable care and skill ought to disclose the fact that the accounts in a given case do not accurately represent the financial condition of the business, the auditor is legally bound to discover and reveal the true state of affairs.

(2) The auditor is *not* an insurer against loss through fraud or error in the accounts. If he exercises reasonable care he incurs no legal responsibility. What constitutes reasonable care depends on the circumstances of the case; for example, a suspicion of fraud makes necessary a greater degree of care.

(3) A "test and scrutiny" audit is sufficient where the custom of the profession permits. Ignorance on the part of the auditor as to what is required in an audit is no defense.

(4) The relation of the auditor to the client is strictly confidential, and he has no legal right to divulge information to third parties. But he is bound to give full information to his client, holding back no material facts except at his own risk.

(5) If loss to a client occurs through the auditor's negligence, the auditor is liable for damages equal to that loss.

Responsibility for Inventories. Until within recent years the auditor's responsibility with reference to the verification of inventories of merchandise has been rather clearly defined. Following the

old English dictum, based on court decisions, that "it is no part of an auditor's duty to take stock," American auditors have commonly followed the practice of assuming something less than full responsibility for the value of the inventory—either for the quantities, or for the prices. Sometimes only a signed statement was obtained from the client certifying to the correctness of the inventory, and the auditor then qualified his report, either in the comments or in the certificate itself, disclaiming responsibility for the value placed on this item. Usually, in addition to the above, the auditor takes other precautions to verify the inventory. This practice puts some responsibility on the auditor, the extent depending largely on the qualifications stated in his report.

Failures and bankruptcies have often revealed overstated inventories. In recent years bankers and others are beginning to insist that the auditor assume more responsibility for the value of the inventories. Many accountants, probably the majority, are not in sympathy with this movement; they maintain that it is impossible, or at least impracticable, for the auditor to take such steps as would place him in a position to take the same responsibility for the value of inventories as he does for the other items on the statements. Objections urged are: that the cost to the client would be too great; that a certificate from the client and a "test and scrutiny" check is sufficient; that the auditor is not ordinarily competent to properly *value* all the items in the inventory; etc. To date these objections have been so successful that it is not the usual practice for an auditor to assume full responsibility for the value of this item.

However, the tendency is towards more complete responsibility, and audit engagements of the future may, perhaps universally, include the obligation to verify the inventory, or perhaps to supervise the actual taking of the physical inventory. A few auditors are even now following this practice when it is desired by the client.

A brief summary of the legal responsibilities of an auditor are given in the following quotation of an English judge (London and General Bank case), who said:

"Such I take to be the duty of the auditor: He must be honest—that is, he must not certify what he does not believe to be true, and he must take reasonable care and skill before he believes what he certifies is true."

PROFESSIONAL ETHICS

It is common knowledge that the great majority of professional accountants in the United States try to do more for their clients than the law requires. Many years ago the American Institute of Accountants recognized the necessity of adopting definite rules to guide the accountant in his relations with his client and his fellow accountants. Accordingly the Council of the American Institute approved the following rules (including amendments):

(1) A firm or partnership, all the individual members of which are members of the Institute (or in part members and in part associates, provided all the members of the firm are either members or associates), may describe itself as "Members of the American Institute of Accountants," but a firm or partnership, all the individual members of which are not members of the Institute (or in part members and in part associates), or an individual practicing under a style denoting a partnership when in fact there be no partner or partners, or a corporation, or an individual or individuals practicing under a style denoting a corporate organization, shall not use the designation "Members (or Associates) of the American Institute of Accountants."

(2) The preparation and certification of exhibits, statements, schedules or other forms of accountancy work, containing an essential misstatement of fact or omission therefrom of such a fact as would amount to an essential misstatement or a failure to put prospective investors on notice in respect of an essential or material fact not specifically shown in the balance sheet itself, shall be, *ipso facto*, cause for expulsion or for such other discipline as the council may impose, upon proper presentation of proof that such misstatement was either wilful or the result of such gross negligence as to be inexcusable.

(3) No member or associate shall allow any person to practice in his name as a public accountant who is not a member or an associate of the Institute or in partnership with him or in his employ on a salary.

(4) No member or associate shall directly or indirectly allow or agree to allow a commission, brokerage or other participation by the laity in the fees or profits of his professional work; nor shall he directly or indirectly accept from the laity any commission, brokerage or other participation for professional or commercial business turned over to others as an incident of his services to clients.

(5) No member or associate shall engage in any business or occupation conjointly with that of a public accountant, which in the opinion of the executive committee or of the council is incompatible or inconsistent therewith.

(6) No member or associate shall certify to any accounts, exhibits, statements, schedules or other forms of accountancy work which have not been verified entirely under the supervision of himself, a member of his firm, one of his staff, a member or an associate of this Institute or a member of a similar association of good standing in a foreign country which has been approved by the council.

(7) No member or associate shall take part in any effort to secure the enactment or amendment of any State or Federal law or of any regulation of any

governmental or civic body, affecting the practice of the profession, without giving immediate notice thereof to the secretary of the Institute, who in turn shall at once advise the executive committee or the council.

(8) No member or associate shall directly or indirectly solicit the clients or encroach upon the business of another member or associate, but it is the right of any member or associate, to give proper service and advice to those asking such service or advice.

(9) No member or associate shall directly or indirectly offer employment to an employee of a fellow member or associate without first informing said fellow member or associate of his intent. This rule shall not be construed so as to inhibit negotiations with anyone who of his own initiative or in response to public advertisement shall apply to a member or associate for employment.

(10) No member or associate shall render or offer to render professional service, the fee for which shall be contingent upon his findings and results thereof.

(11) No member or associate of the Institute shall advertise his or her professional attainments or service through the mails, in the public prints, by circular letters or by any other written word except that a member or associate may cause to be published in the public prints or otherwise what is technically known as a card. A card is hereby defined as an advertisement of the name, title (member of American Institute of Accountants, C. P. A., or other professional affiliation or designation), class of service and address of the advertiser, without any further qualifying words or letters, or in the case of announcement of change of address or personnel of firm the plain statement of the fact for the publication of which the announcement purports to be made. Cards permitted by this rule when appearing in newspapers shall not exceed two columns in width and three inches in depth; when appearing in magazines, directories and similar publications cards shall not exceed one-quarter page in size. This rule shall not be construed to inhibit the proper and professional dissemination of impersonal information among a member's own clients or personal associates or the properly restricted circulation of firm bulletins containing staff personnel and profession information.

These rules are valuable for the guidance of the student of accounting and the young practitioner. Also, the client is given notice as to the kind of service he can rightfully expect from the profession.

THE PROBLEM OF VALUATION

The auditor is continually confronted, during the audit, with the problem of valuation; not only must he correctly value the items on the balance sheet, but he must place the right values on the profit and loss transactions as well. These are interdependent problems, for each decision with respect to an item of income or expense is immediately reflected on the balance sheet, and *vice versa*. For example, the computation (or verification) of depreciation automatically determines not only the depreciation expense for the period,

but also the value of the fixed assets on the balance sheet at the close of the period.

The auditor must keep before him the general principle that the *purpose* of the valuation and the probable future disposal of the item in question are major factors in determining value. Under ordinary conditions the auditor is justified in the assumption that he is evaluating a "going concern." In such a case it is logical to assume that fixed assets will continue to be used for the purpose intended; that merchandise will, in the normal course of business operations, be sold through the usual channels; that accounts receivable will be collected (less the proper allowance for uncollectible items); that liabilities will be paid in full at maturity; and that other normal conditions will continue.

But there may be specific items where special rules must be applied. Some of the merchandise may be out of date or shopworn and should, therefore, be valued on an immediate sale basis; some of the equipment may be obsolete for the purpose intended, and should, therefore, be valued at its *salable* value, less cost of selling, or at scrap value. Perhaps one of the liabilities, such as a bond issue, carries too heavy an interest charge and will soon be redeemed at a substantial premium; therefore, it should probably be stated at a higher value.

For special items of this kind the auditor must ever be on the alert, and correctly reflect true conditions in his report.

For ordinary purposes, and under the normal conditions, the general "rules of thumb" of the accountant may be applied. Typical of such working rules are these:

- (1) Receivables shall be valued at book value less a reasonable allowance for uncollectible items.
- (2) Merchandise inventories and temporary investments should be valued at cost or market, whichever is lower.
- (3) Fixed assets should be valued at cost less depreciation.
- (4) Liabilities should be stated at the maximum value.
- (5) No unrealized income may be included, but provision must be made for all possible losses.

Without opposing directly any of these rules of thumb the auditor must also consider the following questions of principle:

How important for purposes of valuation is the *cost* of a fixed asset, if substantial changes have taken place in the purchase or construction costs since the time of original purchase or construction?

How important, for comparative purposes, are cost figures which include depreciation computed on original cost of an asset that would now cost twice as much, or one-half as much? For example, suppose the auditor to be preparing a cost of goods manufactured statement showing the comparative costs for three separate plants. The plants are very similar in size and type of construction and do the same type of work. One was constructed in 1914 at a cost of \$150,000, another in 1919 at a cost of \$350,000, while the third plant has been built more recently at a cost of \$250,000. In each case depreciation is charged at the same rate on original cost. It is readily seen that factory No. 2 must show the highest manufacturing costs of the three, other things being equal, while factory No. 1 will show the lowest costs. Original cost has nothing to do with current operating efficiency. Therefore, if comparative figures are to be of value for controlling *current* operations, they should be reduced to a current basis. In other words, plant No. 1 and plant No. 2 should be revalued to correspond with *current* construction costs, and the depreciation charged on that cost of reproduction figure. Only then do the cost and profit figures show most clearly the situation on a current competitive basis; and only then does the balance sheet reflect current rather than "antique" values.

Auditors frequently have to consider this question: Should bonds payable be stated at face value (assuming original sale at par) regardless of the annual interest charge they carry? The following is not an unusual illustration of this point:

In the accounts of a certain company the auditor finds three bond issues, all originally sold at par; however, one was sold in 1914 bearing 5 per cent interest, another in 1920 bearing 8 per cent interest, and the last one is of recent date and bears 6 per cent interest. All mature at periods some distance in the future. To value each of these issues at par is to somewhat misstate the true "value" of the liabilities. For example, during the next ten years this corporation must pay out as interest \$300 more on each \$1,000 of bond issue No. 2 than on bond issue No. 1. This \$300 has a present value of about \$220 on a 6 per cent basis. In other words, to correctly value these first two bond issues for balance sheet purposes, No. 2 should be shown at a value approximately 22 per cent higher than No. 1, truly a significant difference in a million dollar issue.

In the particular case cited, perhaps one might re-value each issue on a 6 per cent basis, if that is still the current rate of interest for this type of security. This would cause issue No. 1 to be stated below par, issue No. 2 above par, and the recent issue at exactly par. It must be admitted, however, that this is not the current practice.

Here is a suggestion for handling unusual problems: When situations of this kind arise and the conventional rules of valuation do not seem to result in a true statement of financial condition and operations, it would be wise to consult with the client and arrive at some method that *will* correctly set forth, in the opinion of both, the true state of affairs.

One word of caution might be added. In any case of revaluation, care must be taken that any resulting increase to proprietorship be segregated in a separate proprietorship reserve account (or perhaps Capital Surplus Account) and must not be added to earned Surplus. Net decreases in proprietorship resulting from revaluation are, however, proper charges to Surplus, unless there is in the accounts a revaluation reserve against which they may properly be charged.

CONSTRUCTIVE SERVICES OF THE AUDITOR

A distinction is very often drawn between auditors and public accountants to the effect that an auditor makes critical and analytical examinations of books of accounts, while a public accountant engages in a wide variety of activities, including the preparation of tax returns, the installation of systems of accounting, costing, and budgetary control, and other constructive types of work. Obviously the distinction is not one between an auditor and a public accountant, but a distinction between auditing and the *other* work of a public accountant. One who holds himself out to the public as a competent auditor should have some training and skill in most of these other activities mentioned, though he may not be as highly skilled in each branch as are accountants who specialize in one or more of these activities.

It is here submitted that an auditor, when he has completed his "critical and analytical examination of the books of account," is in a very fine position to render other and more constructive services to his client than the typical audit report furnishes. Especially is this true if the engagement is for a detailed audit rather than a balance sheet audit, for there is an opportunity for much more construc-

tive work in connection with the profit and loss accounts than with the balance sheet items.

Often constructive suggestions may be made in the audit report, or in a supplementary report. It then may be possible to indicate further constructive work that should be done, after first stating the conditions that make this additional service desirable and what can be accomplished by it. Some very attractive engagements have resulted from what began as an annual audit—perhaps only a balance sheet audit. The especially attractive feature of obtaining this additional work is that it can usually be performed between April and December, and hence does not further increase the congestion of the first quarter of the calendar year, the dread or the delight, as the case may be, of the professional auditor.

The auditor who does not take advantage of the opportunity to further serve his client is guilty of failure to live up to the highest standards of the profession. True, the contract with the client may not specify that such work is to be done, but the opportunity is there, and if it is neglected, both the client and the auditor suffer.

Type of Services Rendered. Among these so called "extra" services might be listed Federal and State Income Tax returns, but this is now very commonly understood to be a part of the audit engagement. This subject is important enough to merit a separate section and is discussed later in this chapter.

The more constructive services that might well follow an audit engagement include the following:

Revision of the accounting system or installation of a new one.

A more complete investigation of particular accounts which appear to need more complete analysis.

Installation of a system of budgetary control and/or the preparation of the annual budget.

Examination of certain methods with a view to making suggestions for changes in procedure.

Installation of a cost system, or an examination and revision of the existing one.

Development of a complete system of internal checks on accounting practices.

A detailed analysis of income and expense, perhaps comparative

for a period of years. Many important facts can often be brought out by such an analysis.

An examination of the organization and general routine procedures of the business, with suggestions for changes. It may be said, however, that usually an exceptionally high type of ability is required to render real service in organization work. Many excellent auditors might fail in an attempt to revise the internal organization of a large business.

Business advice of various kinds, relating perhaps to the general or departmental policies of the business. Again, only a very high-grade auditor is competent to act in this capacity.

The services to be rendered depend mainly, of course, on the circumstances of the case. The above suggestions are only illustrative of the wide variety of opportunities for service which are open to the competent accountant in connection with an audit engagement. Is it not evident that here lies an opportunity for real service, a type of service very beneficial to the client and, incidentally, highly remunerative to the professional accountant?

Financial Management

Part I

1. Introduction

Chapter I

Nature and Importance of Finance

1. Scope of subject

Financial management treats of the problem involved in the administration of the 'finances of a business enterprise. It deals with the securing and handling of the money and credit required in the operations of a business. It includes many problems' which are not apparent at first glance. In the conduct of any business, capital is used as a means of securing the performance of certain operations. The purpose of these operations is to make a profit. In order that this result may be attained it is necessary that the initial capital be employed both efficiently and wisely.

Financial management, in brief, may be said to involve three things:

1. The determination of the amount of capital needed
2. The securing of this capital
3. The proper control of its use

2. Analysis of problem

Consideration of the three major problems of financial management suggested in the preceding paragraph involves the consideration of a number of related prob-

lems. All the operations of a business are in a sense financial operations and the financial management required by them involves, more or less, all business management. For the purpose of discussion the subject matter which is to follow will be organized under the following general headings:

1. Estimating capital requirements
2. Sources of capital
3. Methods of securing capital
4. Control of capital disbursements
5. Control of cash requirements
6. Control of credit
7. Relation of accounting and statistics to financial management

Each of these principal topics will be subdivided in the discussion, but the general headings are sufficient to indicate the organization of the subject matter. A brief discussion of each of these topics will afford the reader a bird's-eye view of the study which he is commencing.

3. Estimating capital requirements

The operations of a business are dependent on capital, and a certain amount of capital is necessary for the efficient conduct of any business. On the other hand, the use of too much capital is burdensome and unprofitable. In order to secure as much and no more than is needed, the capital requirements of a business must be predetermined and plans must be made for securing the proper amount. Failure to observe these requirements leads, almost surely, to either an excess or a shortage of capital. For instance, if a business borrows \$100,000 when it has use for only \$75,000, the cost of the additional \$25,000 becomes an unnecessary expense. On the other hand, if only \$50,000 is borrowed and \$75,000

is required, the business will be greatly inconvenienced and may suffer loss because of the lack of funds. Careful planning and accurate estimating of capital requirements will help to eliminate such difficulties.

From the viewpoint of financial planning, the capital of a business may be thought of as of two kinds: fixed capital, that which is invested in fixed assets, such as land, buildings, and machinery; and working or revolving capital, that which is invested in current assets, such as notes, accounts receivable, and merchandise inventory. The technical use of the term "working capital" is explained in Chapter III. In order to determine the amount of the fixed capital requirements, it is necessary to consider the long-time capital needs of the business. The working capital requirements are subject to sudden and frequent fluctuations and must be estimated for relatively short periods of time. It is necessary, therefore, to consider long-time or fixed capital requirements and the short-time or current capital requirements, as independent topics.

4. Sources of capital

The amount of the capital requirements having been determined, the next step is to decide upon the sources from which the capital is to be secured. The source of capital is determined, in any case, mainly by two things:

1. The use which is to be made of the capital
2. The nature of the obligation to be incurred in securing the capital

Improper use of capital is often due to a failure to realize that the nature of the obligations incurred in securing capital should correspond to the use which is to be

made of it. Even the beginning student of finance will recognize that it is unwise to borrow funds by the issuance of a short-time obligation, such as a six months' note, and to invest these funds in property, such as buildings and machinery, which are to be retained for use in the business during a long period of time. It should be clear that a business that follows this practice is likely not to have sufficient funds available for paying its obligations as they mature.

5. Estimating financial requirements

Estimating the financial requirements of a business is a difficult undertaking; and this is probably the reason why so many business firms fail to make financial plans and why writers on finance so commonly fail even to discuss the subject of estimating capital requirements. Financial plans are necessary, however, if financial management is to be anything more than accident and guesswork, and the planning problem should be attacked by both the writer and the practitioner. The determination of the fixed and working capital requirements of a business is the first problem of financial management presented by the business.

With respect to the sources from which it is derived, capital may be classed as either owned capital or borrowed capital. Owned capital is supplied by those who have a proprietary interest in the business, as the individual proprietor, partners, or stockholders. Borrowed capital is supplied by those who have only the interests of a creditor in the business, as banks, bondholders, and trade creditors. The different results obtained by resort to these different sources of capital will be discussed in subsequent chapters.

6. Methods of securing capital

Having determined the quantity and the kind of capital to be secured, it becomes necessary to decide upon methods for securing it. The methods to be employed in securing capital will be determined by:

1. The amount of capital desired
2. The kind of capital desired
3. The size and nature of the business for which the capital is desired
4. The condition of the financial market at the time the capital is desired

A business desiring only \$10,000 of capital will not employ the same method for securing it as would be employed by a corporation desiring \$10,000,000. Neither will a business desiring capital for a short period, say three months, employ the same methods as would be employed by a business desiring capital for a long period, say fifty years. Different kinds of mercantile commodities are marketed in different ways, and so too are different kinds of financial securities, or obligations. Again, a small business, conducted by a sole proprietor, would hardly be in position to employ the same means of securing capital as would be available to a large business operated by a corporation. Finally, the same business would, at different times, use different means of obtaining capital. Its plans for securing capital would be affected by the condition of the money market, just as the sales plans of a merchant are affected by the condition of the commodity market.

After a plan for marketing the securities has been determined upon, a certain amount of accounting and statistical data must be provided for the information of

the investing public; and certain legal formalities must be complied with in order to satisfy statutory requirements and to protect investors

7. Control of capital disbursements

In the past, writers on finance have regarded methods of securing capital as constituting the principal part of financial management. It is now recognized, however, that the proper use of capital is a feature quite as important as the method by which it is secured. Capital is secured in order that it may be used in earning a profit; but this object cannot be attained except by wise use of it. Otherwise, it may easily happen not only that there will be no profit but that the capital itself may be lost. Further along in this text, an attempt will be made to indicate the purposes for which capital may properly be used and how its use for these purposes may be so controlled as to yield the maximum return.

In brief, the purposes for which capital is to be used should be determined before it is secured and, having been secured, its use should be so controlled as to secure accomplishment of the desired purpose. Of course, all plans and estimates are subject to change, but the special undertaking of financial management is the making of intelligent plans and in so controlling the operations of a business that these plans may be realized.

8. Control of cash requirements

The capital requirements of a business must not be confused with its cash requirements. The capital of a business includes all the property both tangible and intangible which is used in the conduct of the business. In most business, only a small part of this capital is at

any one time in the form of cash. However, a certain amount of cash is necessary at all times in order that the operations of the business may be carried on. The actual amount of cash on hand will, however, fluctuate from time to time with changes in the volume of business done. For instance, a business which has seasonal sales will need a larger amount of cash during the period of heavy sales than during the period of light sales. It must also be remembered that the demand for cash is an imperative demand, and that, when it is needed, disastrous results are likely to ensue if it is not forthcoming.

The amount of cash required to finance a business is not to be thought of as the amount of cash which must be at all times on hand. It is rather the amount which must "flow into" the business during a given period of time. In order to determine the cash requirements of a business, it is necessary to take a certain period of time and to estimate the amount of cash which it will be necessary to disburse during that period. To the amount to be disbursed, add the amount of cash balance which it is desired should be on hand at the close of the period. The total will be the cash requirement for the period. Now, if from this total we subtract the amount of cash on hand at the beginning of the period, the difference will be the amount of cash which must be secured during the period. To illustrate, suppose a certain business finds it will be necessary to disburse \$40,000 of cash during the month of January and that it is desirable to have a cash balance of \$5,000 on February 1. Its cash requirements for January are \$45,000. If its cash balance on January 1 is \$6,000, there will remain \$39,000 to be secured during the month of January.

9. Control of credit

With the growth of modern large-scale industry, business has come to be conducted, to a large extent, on credit. If, therefore, a business is to be managed efficiently, provision must be made for securing accurate knowledge concerning both credit extensions and collections; and these functions must be constantly under control. Plans for credit extension must be made as much a part of the general plans of a business as are the plans for plant and equipment; for the more credit is extended and the longer the period of credit extension, the greater will be the capital requirements of the business. Consequently, when a new business is organized, the managers should study very closely the credit policy of the particular trade, and should plan their capitalization and their finances accordingly. In like manner, when a new line of merchandise is taken on, the managers should study the credit extension which will be required to carry it and should plan, as accurately as possible, for the necessary funds.

In all financial plans, the credit policy of the business must be considered. Credit control is one of the most important problems of financial management. This control involves the following:

1. Planning credit to be extended and credit to be received
2. Planning to secure the funds necessary to carry the credit extensions
3. Establishment of limitations so that the credit extensions shall not exceed the estimates
4. Keeping such records and preparing such reports as will make it possible to enforce respect for the limitations established

10. Relation of accounting and statistics to finance

There has been much discussion in the past as to the relation of accounting, statistics, and finance to business management. The accountant often does work in connection with the financing of a business; and the specialist in finance often does work of an accounting and statistical nature. It is not thought worth while in this discussion to attempt an arbitrary distinction between financing and accounting. It is desired, however, to insist that proper financing is possible only when the financial plans are based on accurate and comprehensive information. Such information can be obtained only from proper accounting and statistical records and reports. Accurate estimates of financial needs cannot be made without adequate statistical information with reference to both the past and the probable future. Control over the disbursement of funds is dependent on reports with reference to the financial operations of the business. Financial control and accounting control are very closely related, and one of the principal objects of this text is to point out that relationship and to show how accounting serves as the basis of financial management. Much of what will be here presented might well be presented in a text on accounting. This is quite logical if accounting is regarded, as it is by the author, as a means or method of obtaining information which will serve as a basis of business management; for financial management is only one phase of the administration of the business as a whole.

11. Importance of financial management

Financial management involves financial planning, and without such planning the success of a business is

a matter of accident. Many businesses, especially small ones, fail to plan ahead with reference to their finances; and many of the failures of such businesses are due to this fact. The reports of credit agencies show the principal cause for failure of business firms is "lack of capital." This lack of capital in many cases could have been prevented if the financial requirements had been estimated and timely plans made for meeting them. The failures were due to the fact that the managers waited until the capital was urgently needed before attempting to secure it, and then they were unable to obtain it.

Mr. Walter H. Cottingham, President of the Sherwin-Williams Company, very aptly says:

The small business does not raise additional funds easily. No money is raised "easily"—it has to be bargained for. But I think a part of the smaller man's difficulty may be traced to two reasons. The first is a lack of planning ahead by means of which he might have secured a schedule of money requirements for at least a few years in advance. This carelessness naturally results in a panicky getting of money only when it is urgently needed. The second difficulty is analogous; because he has not planned, the owner has no clear comprehensive idea of just what he can afford to pay for money and is likely to hold out for too low a price until suddenly he finds himself "up against it." Then he pays too high a price—if he gets the money at all.

Planning both sales and money ahead gives a freedom that cannot otherwise be had. We, like most new companies, began with only a small capital; then when we needed more money we issued a preferred stock, and later we issued another series. Always the money had to be raised in what amounted to a makeshift way; for the money plans followed the sales plans instead of going hand in hand with them.

When we made a sales plan, the question at once arose: Can we get the money to carry this through? That fear of money hampered and constrained. The better plan is to take care of all

reasonable future requirements at once. If you need only a certain amount today but know that you will need double that amount next year, do not issue stock only for today's amount; instead, authorize an issue that will meet the requirements for a long time ahead and then offer for sale only that amount which is necessary for today. There is a slight additional expense in the authorization of the larger amount, but that expense will prove to be less than the added premium which one usually has to pay in order to get back previously issued stock that must be retired before a new issue is put out.

What you can afford to pay for money is thus not an abstract calculation, but is the result of a co-ordination of the sales and productive sides of the business.

To summarize: Accurate financial records and statistics make it possible to forecast the future and thus to predetermine wise policies, or plans, for administrative control.

Financial planning makes it possible:

1. To plan ahead and to determine the needs of the various departments and of the business as a whole for a fiscal period and to insure that, at the required time, funds will be available to meet those needs
2. To secure such a co-ordination of operations as will permit of a reduction in the amount of capital needed for carrying on the business and to secure such a distribution of the outlay throughout the year as will correspond with the financial abilities of the company
3. To insure that there will be available cash to meet the financial obligations at all times
4. To provide an excellent check on the activities of the different departments or divisions of the business
5. To arrange for funds in advance of their requirements and thus often to avoid the payment of an excessive rate in times of urgent need

12. Elementary principles of financial management

Financial management is a complex problem and cannot be reduced to hard-and-fast rules. The proce-

ture in any case will vary with the size of the business, its organization, and the nature of its operations. There are, however, certain principles which are of more or less general application. Lough states these as follows:

1. Study and utilize all sources of capital, including earning power and credit.
2. Do not be afraid to borrow for legitimate business development when you can earn profits and repay the loan when due.
3. Do not dissipate capital on side lines and outside investments.
4. Systematically accumulate assets, both tangible and intangible.
5. Always keep available sufficient cash and convertible assets to meet emergencies and to seize special opportunities.
6. Use income sparingly for living expenses and pleasure, but freely for business maintenance and development.
7. Use foresight, which is the cardinal virtue in all financial operations; make budgets to govern all expenditures.

These are the prudent, indisputable rules for sensible financing. They have been preached and proven over and over again for many centuries past. The wisdom which these homely rules embody applies just as truly to the business of the Standard Oil Company and of the United States Steel Corporation as to the affairs of John Smith. A man who can grasp these principles, hold them continually before his eyes, and apply them intelligently is bound to handle his finances wisely both in his business and in his private life.*

The foregoing may undoubtedly be regarded as "prudent, indisputable rules for sensible financing." The chief difficulty lies, however, not so much in the statement of the rules as in their application.

*Lough, "Business Finance."

13. Corporation as a financing device

The general principles of finance, as above stated by Lough, are applicable alike to the financial management of the Standard Oil Company or of the United States Steel Corporation and in the financial management of the business of John Smith. The method of application in different businesses may, however, be quite different. Even the form of proprietorship may be a factor of considerable importance. Funds can usually be obtained more readily by a corporation than by a partnership or by a sole proprietor. Again, methods which are available to corporations are not always available to partnerships or to sole proprietors. The corporate form of organization is usually resorted to, therefore, whenever any considerable amount of capital is to be secured. The corporation has, consequently, come to be regarded as the typical business organization. In this text the customary practice will be followed in most of the discussion, and the corporate form of organization will be assumed. A considerable part of what is stated, however, is applicable to any business regardless of its form of proprietorship. In cases where it is thought that the form of proprietorship may be of any particular significance, attention will be called to the effect of the different forms.

2. Estimating Capital Requirements

Chapter II

Requirements for Fixed Capital

14. Classification of assets

The assets of a business may be divided into two classes: first, those which are to be retained in the business for a relatively long period of time and to be used in its operations; and, second, those which arise as a result of the operations of the business and which, because of these operations, are constantly changing both in form and amount. The former are known as fixed, or permanent, assets while the latter are termed current, or floating assets. Dicksee says: "Fixed assets are those with which and current assets are those in which the business is carried on." This statement is not literally true, but it is suggestive of the nature of these different classes of assets. Land, buildings, machinery, office furniture, and equipment are illustrations of fixed assets. Cash, accounts receivable, notes receivable, and merchandise inventory are illustrations of current assets. It is not always easy to determine whether a particular asset should be classified as a fixed asset or as a current asset. There are many assets which are on the border line. Usually a good test is to determine whether the asset has been secured to be used in the conduct of the business or whether it has been secured only for purpose of resale. If the former, it is usually a fixed asset, while, if the latter, it is usually a current asset. Items, such as supplies, which are to be

used in the operations of the business are known as "deferred charges to expense." They are similar to current assets since they are short-lived and by their consumption will give rise to current assets.

15. Capital requirements as affected by nature of assets

The distinction between fixed assets and current assets is of considerable importance in financial management. When capital is invested in fixed assets such as land, buildings, and machinery, the investment assumes a more or less permanent character. It is not ordinarily expected that these assets will be in any way disposed of except as they become worn out or obsolete. The capital invested in such assets will, therefore, be recovered only gradually and as a part of the income secured as a result of the use of these assets in the operation of the business. It is necessary, therefore, that the capital used in the purchase of fixed assets be secured under such conditions that it may be retained by the business for a relatively long period of time. A business must estimate its long-time capital requirements, that is, the amount of capital which it will need to have invested in fixed assets, and should arrange to obtain it on the most favorable terms. In practice, capital invested in the fixed assets of a business usually remains so indefinitely.

Although money invested in the original fixed assets of a business may be recovered as a part of the income secured during the life of the asset, it is necessary, if the business is to be continued, that worn-out or obsolete assets be replaced. This necessitates reinvestment. The money invested in fixed assets may, therefore, be well termed permanent capital; and in estimating the required

amount of such capital, we may speak of the permanent capital requirements.

When money is invested in current assets, such as merchandise and accounts receivable, the investment is assumed to be only a temporary one. It is supposed that the money so invested will be shortly recovered by sale of the assets. The readiness with which current assets can ordinarily be converted into money usually makes it easier to secure funds for the purchase of current assets than for the purchase of fixed assets. Capital invested in current assets is sometimes termed working capital. For different uses of the term working capital, see Chapter III, page 33.

16. Constant and variable demand for capital

As explained in the preceding paragraphs, a part of the capital of a business consists of fixed, or permanent, assets and another part consists of current assets. This classification is based largely upon rapidity of turnover. An asset with a slow turnover is termed a fixed asset, while one with a rapid turnover is termed a current asset. This classification is useful as indicating the kind of obligation which should be incurred when loans are needed. However, a classification based on turnover is not a very satisfactory one for use in estimating the total capital requirements of a business, for if a concern never allows its merchandise inventory to get below a certain amount, that amount is just as truly a permanent investment in the business as is the cost of the longest-lived of its permanent assets. In the same manner, if it is found by experience that it is impossible to reduce accounts receivable below a certain minimum amount and that a certain cash balance must be retained in the

bank at all times, the amounts so invested in these assets constitute a part of the permanent capital requirements of the business. But the total value tied up in inventory, in accounts receivable and in cash will not be constant. At times it will be much greater than the minimum, and we may conceive in each case a maximum and a minimum, between which the capital requirements would be variable in amount. From this point of view, the capital of a business may be classed as constant or variable. The constant capital is the total investment when assets are at the minimum, while the variable capital is the difference between the maximum and minimum amounts.

For some purposes, as for instance in the calculation of cash requirements, the distinction between the constant and the variable capital requirements is quite important. Even in the calculation of long-time capital requirements it has some significance, since it may be desirable to supply the cash necessary for meeting the minimum requirements of the business by the incurring of long-time obligations and to supply the cash necessary for meeting the variable capital requirements by means of short-time obligations. This will be more apparent as the long-time and short-time capital requirements of a business are discussed.

17. Permanent capital requirements

In determining the long-time capital requirements of a business it is necessary to consider two things:

1. The initial capital required at the time the business is organized
2. The additional capital required in order to maintain the business at its normal efficiency and to provide for proper expansion

18. Initial capital requirements

Considerable attention should be given to initial capital requirements. The total amount of capital needed and the methods by which it is to be secured must be gone into thoroughly. One of the greatest faults to be found with the typical organization procedure is the failure to take everything into consideration—the failure to make proper allowance for contingencies. It has been estimated that fifty per cent of the capital put into new enterprises is lost because provision is not made to carry the undertaking through to prosperity. It is the duty, therefore, of the accountant or other executive in preparing an analysis of the needs of a proposed organization to be thorough in all particulars.

Analysis of capital needs—Gerstenberg gives the following as an illustration of initial capital needs:

The cost of a gas plant and of acquiring its business may be subdivided as follows:

1. Preliminary development, which includes:
 - a. Investigation of the project
 - b. Assembling of parties who may be willing to participate
 - c. Preliminary engineering and legal advice on the proposition
 - d. Canvass of territory to ascertain whether sufficient business can be obtained
 - e. Estimate of cost of plant and probable income
 - f. Incorporation of the company
 - g. Securing of franchise
2. Real estate
3. Labor, materials, and subcontracts
4. General contractor's profit
5. Engineering
6. Expense of company organization during construction

7. Interest during construction
8. Taxes and insurance during construction
9. Stores, supplies, and working capital
10. Acquiring or establishing the business, which includes:
 - a. Expenses of canvassing for business
 - b. Advertising
 - c. Setting meters free of charge
 - d. Interest on cost of plant in excess of income until business becomes self-supporting
 - e. Taxes and insurance during that time
11. Legal expense
12. Financing, including banker's commission, discount on bonds, and promoter's profits

Many of these items are overlooked by those who have had no experience in the actual establishment of such a business, and that, no doubt, is the reason why the cost of plants and the cost of establishing businesses almost always largely exceeds the anticipated outlay.

The value of a gas property and business, however, exceeds the sum of the items I have mentioned, if the property is well located. If such a plant were not worth more than cost, it would be unwise to construct it. And if it were known that the value of such a plant would be cut down for rate-making to its actual cost less depreciation, capital could not be found to build it.

Actual disbursements in money for the construction of a gas plant must be made:

1. For preliminary development prior to beginning the actual work of construction
2. For real estate
3. For material and labor

These expenses are sometimes called structural cost. After construction of the plant, additional disbursements must be made.

4. For the development of the business

These four elements of a gas plant are actual disbursements of money. There are also other outlays which are commonly

called overhead charges. Such charges are really a part of structural cost. Besides, there are other elements of value of such a property, the principal of which are:

1. The value created by an organization of pieces of physical property into an income-producing unit. This value was recognized and stated in the case of *Newark v. State Board of Taxation*, 37 Vr. 466 and has been repeatedly recognized and assented to by the courts. *Adams Express Co. v. Ohio*, 165 U.S., 194; and 166 U.S., 185.
2. The value created by uniting two or more plants or properties engaged in public service, whereby greater efficiency and reduced operating expenses produce better results at less cost; *Cleveland Ry. Co. v. Backus*, 154 U.S., p. 444.
3. The rights or special franchises which confer the easement or right of way through lands indispensable to the construction and operation of the plant and which also confer vitality and earning power on physical property.*

The factors to be considered in estimating the initial capital requirements of a business are indicated quite clearly in the foregoing quotation. Although the illustration deals with the financial requirements of a gas company, the statements made will apply, in the main, to the initial financial requirements of any other type of business. Of course, there are certain items of cost peculiar to each type of business and all such items require special consideration.

To summarize the foregoing discussion, the initial capital requirements for any business are determined by:

1. The cost of the tangible assets to be secured at the time of its organization
2. The expenses incident to the organization of the business
3. The cost of the goodwill or other intangible assets secured by the company

*Gerstenberg, "Materials of Corporation Finance.

In addition, every business must have also some working capital before it can commence to operate.

19. Control of initial expenditures of capital

Careful control must be exercised over the initial expenditures of capital. This is especially true with reference to expenditures for organization purposes and in the purchase of intangible assets.

In making the preliminary plans, in perfecting the organization, and in securing the necessary capital for getting a business under way as a going concern, certain expenses will be unavoidable. There is a constant tendency to increase these expenses, especially where outsiders are employed to do the work. They have no permanent financial interest in the business and are not primarily interested in its success. Their chief concern may be to obtain as much as possible for their services and they may even spend money lavishly for no other purpose than just to give an appearance of importance to what they do.

Another danger in the initial organization of a business is the expenditure of excessive amounts for intangible assets, such as goodwill, patents, franchises, etc. It is a very common practice for such assets to be overvalued and for a company to start business with a large part of its capital tied up in assets which are not a source of income and which may have little or no sales value. Capital is expensive, and unless it is invested in income-producing property, failure is almost inevitable. The value of any property, tangible or intangible, is dependent on its earning capacity and this, especially in the case of intangible property, is frequently very difficult to determine.

20. Additional permanent capital requirements

Gerstenberg, in his discussion of the capital needs of a gas plant, as above quoted, stated that in addition to the initial capital needs, capital must be provided "for the development of the business." Any successful business tends to expand, and expansion requires additional capital. Even if a business does not expand, it must at least keep pace with modern development and to do this requires an expenditure of more and more capital for the purchase of new and usually more expensive equipment.

In planning capital requirements, therefore, one must consider not only the initial needs of a business, but also the additional needs which must be met during the period of its development.

Some of the more important reasons for requiring such additional capital are:

1. Plant extensions
2. Equipment additions and changes
3. Adoption of new lines
4. Outside investments such as the establishment of subsidiary companies

21. Plant extensions and equipment additions

The estimate of expenditures for additional plant and equipment should be based upon the sales and production plans of the business. If a proper system of budgetary control is to be maintained, estimates of future sales will be prepared and the production program will be based upon the anticipated sales. The production program then becomes the basis for an estimate of plant and equipment needs. One must not make extensive additions to plant and equipment until a market for the

goods to be produced by such additions is at least fairly apparent. To do otherwise is apt to lead to the tying up of past profits in equipment which is not needed.

The relation of the plant and equipment program to the marketing program is well brought out by Mr. Walter H. Cottingham in his discussion of what one "can afford to pay for money." He says:

A rule might be phrased somewhat in this fashion: "The amount that can be paid is the difference between the annual charge put upon the business by the new money and the additional income which the new money will provide by means of additional facilities."

Application of this rule not only sends us at once to the examination of our present statement of condition and statement of operations—more particularly the statement of operations—but also compels us to look ahead to see what business we may reasonably expect to do in the future. Then we find that instead of working forward from a plant of a certain capacity to a market, we must work back from the market to the plant. This would seem self-evident were it not that the country is dotted with idle plants that are losing money because they were built before the sales capacity was known. They were financed on output instead of, as they should have been, on sales.

It is the sales that determine both the amount which the plant should be made capable of producing and the amount of money which should be invested; and it is my view that no financing can be intelligent unless first a definite sales plan is formulated and carried through. I look at a plant or a store in its relation to its ability to fill the demands of the selling force, and not as a means of providing something to sell. It is the sales that determine the size of the plant. That is the plan we have carried out with our own company.*

There must be a correlation between the sales, production, and financial programs. It is unwise to secure

*System, May, 1920.

equipment for the production of goods which cannot be sold. It is equally unwise to plan a sales campaign without consideration of the production and financial possibilities of the business. In the latter case, orders may indeed be secured, but if, by reason of either lack of equipment or lack of funds, the orders cannot be filled, then the advertising and selling expenses will represent a loss—and the larger the orders the greater the loss. Scientific business management is possible only when it is based upon a carefully prepared and fully correlated budgetary program. The present discussion is primarily concerned with financial management and the preparation of financial budgets, but one must remember that these are dependent upon the conduct of the business as a whole.

Obsolescence—One of the chief difficulties in planning ahead with reference to equipment costs is the impossibility of estimating the changes which may have to be made because of inventions, changes in methods of manufacture, and the like. Machinery which is in excellent physical condition may become obsolete and useless either because of inventions or because of changes in method. It is practically impossible to estimate the amount of loss by reason of obsolescence. Probably the best method of meeting such emergencies is to accumulate a liberal reserve fund which may be drawn upon as contingencies arise. Such reserve funds may be invested in the assets of the business provided they are in a form which is readily convertible into cash. Some firms, instead of accumulating a reserve fund, attempt to keep a reserve credit against which they can draw. Some such provision is necessary in any line of business in which machinery and equipment is an important factor, and

where sudden changes in the type of equipment are likely to occur. During the last twenty years many industries have developed new manufacturing processes which have rendered obsolete a large part of their productive equipment. Where no provision for replacement has been made, insolvencies and bankruptcies have occurred; and in one case a whole industry has been given a poor credit rating on this account.

22. Adoption of new lines

The additional capital required to finance new lines is a factor which must be given careful consideration. The managers of a successful business are seldom willing to slow up. They almost invariably desire to continue to grow and to expand. This they may do in one of three ways:

1. By handling a larger volume of the commodities in which they originally dealt
2. By adding new lines which are closely related to the lines already handled
3. By adding side lines, that is, by branching out into business of a different kind and nature from their old business

Undoubtedly the first is the most conservative method and the one which involves the least difficulty in the matter of estimating financial requirements. Past experience makes it easier to estimate future needs. If, however, a firm undertakes to obtain the desired volume of business through the addition of new lines, it must handle new problems of management as well as new problems of financing. The officers and managers of the company may not have the training or experience requisite for handling the new lines, and this may lead to

losses and to the employment of more capital than was anticipated. Such a result is especially probable if the new line is what may be called a side line, that is, something entirely different from the original business of the company. Many prosperous businesses have dissipated the accumulated profits of years in vain attempts to promote some side line with which they were unfamiliar and with respect to which they could not make accurate forecasts.

Extensions into allied lines are of two types:

1. Where a manufacturing or producing firm branches out to produce the raw materials needed in the production of the principal commodity .
2. Where a concern manufactures a by-product which is produced from parts of the material used in the principal product or uses its facilities for carrying on some additional business and thus gets a greater service from the facilities at its command

The expansion of the United States Steel Corporation illustrates the first type. This company has acquired the ownership of mines yielding the ores used in steel production; the ownership of coal mines yielding the fuel resources for the manufacturing process; and the ownership of certain transportation facilities employed in transporting the ore and fuel. By this expansion the company has been able to control both the quantity and the cost of the raw materials which it uses in manufacturing the finished product and has thus been enabled both to make more accurate plans and, usually, also to lower costs. The Standard Oil Company has acquired extensive holdings in the oil fields and is thus enabled to control its supply of crude oil. The Diamond Match Company owns timber lands from which it obtains the wood used in the

production of matches. In all these cases, the extension has been what may be termed a "vertical" extension, that is, it has been made so as to secure further control of the processes involved in the preparation of some particular product. There is a tendency for all large businesses to expand in this way. It makes them more independent of others; it keeps competitors from gaining control of the raw materials; and it favors command of the market.

The expansion of the large packing concerns illustrates the second type. These concerns have branched out into various lines of business in order to make use of scrap materials arising from the production of meat; and they have also made greater use of the facilities employed in the marketing of the meats. In pursuance of this policy they manufacture various by-products from the hides, bones, and other parts of the animals which are used in meat production; and they carry fruits and other products in the cars which are used primarily for transporting meats.

Assembling departmental estimates—When a business—which is expanding by either of the methods suggested in the foregoing discussion—undertakes to make an estimate of its financial requirements, it should consider each part of the business as a separate unit. For instance, the United States Steel Corporation makes separate estimates of the financial requirements of each mine and transportation company. Then the estimates of all departments are combined in order to determine the financial requirements of the business as a whole. The same would be true in the case of a company such as Swift and Company, which has a number of factories producing different articles.

In making estimates for the different departments or subsidiary companies, it is necessary to remember also that the volume of business and hence the financial requirements of each unit will be affected by the volume of business of the other units. For instance, the financial requirements of the oleomargarine factory of Swift and Company will be affected by the number of animals slaughtered in the packing plant. The volume of such a business will affect the amount of capital required by it; and it will affect the amount of working capital more than it will the amount of permanent capital. The packers have, therefore, an elastic line of credit with the banks so that they may increase their working capital as occasion may require.

23. Outside investments

A business may invest its funds in other companies:

1. As a means of earning an income on funds which, temporarily, are not needed in the conduct of its own business
2. In order to gain control of another company so as to regulate its prices; to limit its competition; or to control the disposition of its output
3. To insure raising funds in a period of depression; the securities of an old well established firm can be sold, while securities of a new firm can not be sold in a depression

In the first case, the investment is of a temporary character and is usually made from the working capital funds, although funds intended for permanent investment, and not immediately needed, may be so invested.

In the second case, the investment is necessarily a more or less permanent one and may be fairly regarded as fixed capital and, after being made, involves no financial problem except one of continuance. It is possible,

of course, that by such an investment the investing company may acquire a controlling interest and thus become responsible for financing the subsidiary company.

In planning long-time capital requirements, it is advisable to take into consideration the probable needs both of the principal company and of any other companies which are likely to become subsidiary to it.

24. Methods of providing permanent capital

In the foregoing discussion it has been emphasized that the long-time capital requirements of a business should be estimated so that plans can be made for obtaining the necessary amount. There are three different methods which may be followed with reference to obtaining capital for permanent use:

1. Obtain the capital at the time when the need for it arises.
2. Provide an excess over present needs and invest the excess in assets which can be quickly converted into cash when needed.
3. Retain in the business a considerable portion of the earnings of each period and invest these earnings in permanent assets. If it is desirable to retain some part of the earnings for some particular use in the future, this can be done by means of a sinking-fund reserve.

Obtaining capital only as needed—The first method is a very common one and incurs no expense until the capital is needed. It has certain disadvantages, however, in that the capital may be needed at a time when it is difficult to secure, and one runs the risk of either not getting it at all or of getting it only at a very high cost. There is another disadvantage in that some of the parties who have provided the original capital may have claims which must be satisfied before additional loans

can be obtained, and the satisfaction of their claims may be costly. For instance, certain bonds may have been issued with an agreement that they should be a first lien on the property. If, now, it is desired to issue additional bonds, it may be necessary to purchase and retire the first issue; otherwise, the later bonds would have to rank as a secondary claim against the property and this would affect their market value unfavorably. It is desirable, therefore, in planning an issue of bonds or stocks to look ahead and to secure authority for an amount sufficiently large to meet anticipated needs for at least the next few years. Under such conditions, a part can be issued at the beginning of the business and more as required. This plan does not eliminate the difficulty which arises when sales have to be made on a poor market.

Obtaining capital in excess of present needs—If an excess over present needs is obtained and invested in readily convertible assets, the requisite amount of capital is assured as needed. This method, however, has two disadvantages.

In the first place, if funds are to be kept in readily convertible form, they must be invested in bonds or stock of other companies or be held in the bank as a special deposit. In either case, the income received from their use will not be more and is likely to be less than the cost. It is ordinarily not profitable for a mercantile or industrial firm to obtain funds in order to lend them to others.

In the second place, the assets in which the funds are invested may not be readily convertible at the particular time when the cash is needed. In times of financial stringency there are few assets which are easily converted into cash. In such times it may be just as diffi-

cult for a company to sell the stocks or bonds of other companies as to sell its own stocks or bonds.

In the case of new companies, it is probably an advantage to have some stocks or bonds of well-established companies, because these are more readily salable and, therefore, more useful in cases of emergency than are the stocks or bonds of the new company.

It is doubtful, however, whether many firms have surplus funds which they can invest temporarily in the stocks or bonds of other companies, in normal times. Following 1917, there were large investments in United States Government securities, particularly Liberty Bonds. During the boom years preceding 1929, there was considerable speculation in the common stocks of other companies; the "investment" item sometimes included even the corporation's own stock, purchased for speculation. In the succeeding depression years, many of the strongest firms carried large temporary investments while waiting for improvement in general business conditions; they were unwilling to make large expenditures for new equipment until there were evident fair indications of recovery.

Retaining earnings in business—Undoubtedly the most conservative and desirable method by which a business may meet expansion needs is by the accumulation of earnings. Some of the largest and best-known businesses have developed in this way. In the recent literature of Swift and Company, it is pointed out that their growth has been due to the retention and reinvestment of the profits of the business. Other large companies have followed the same plan. The present practice of declaring stock dividends tends to keep profits in the business. One difficulty likely to arise under this plan is that the profits may not accumulate as rapidly as the company will have need for funds. Another diffi-

culty is that profits accumulate only gradually, while expenditures for expansion are likely to be intermittent. Sometimes a certain part of the profits is set aside in a sinking fund with a reserve so "ear-marked" as to indicate the purpose for which it is to be used. Such funds may be temporarily invested in readily convertible assets.

Chapter III

Requirements for Working Capital

25. Meaning of working capital

It was stated in Chapter II, page 14, that the assets of a business may be divided into two classes: first, those which are retained by the business for a relatively long time and used in the operations of the business; and, second, those which arise as a result of the operations of the business and which, because of these operations, are constantly changing both in form and amount. The former are known as fixed, or permanent, assets while the latter are termed current, or floating, assets.

In a similar manner the liabilities of a firm may be divided into two classes:

1. Those which the business promised to pay within a short time after they were incurred, such as debts due to merchandise creditors and to banks. These are called current liabilities.
2. Those which are of long duration and will not have to be paid until a considerable period of time after they are incurred. These are known as fixed, or permanent, liabilities.*

Since the current liabilities must be paid within a relatively short time after their incurrence, it should be evident that any funds received, either directly or indirectly, as the result of contracting a current liability should always be invested in current assets—never in fixed assets. If such funds are invested in fixed assets, the danger of failure to make repayment at maturity is

*J. O. McKinsey, "Bookkeeping and Accounting."

increased because of the difficulty in converting those assets again into cash. For instance, if a business borrows \$20,000 from a bank by means of notes maturing in six months and invests the funds thus obtained in machinery and equipment, it may find difficulty in trying to procure the \$20,000 in cash requisite for paying these notes when they become due. The money cannot be gotten in so short a time from the use of the machinery and equipment in which the original funds were invested. Had the notes been for a five-year term, the means necessary for their payment might have been supplied through the income arising from the business. But notes running for a period of five years would be classed as a fixed liability.

If the \$20,000 borrowed from the bank, as suggested in the preceding illustration, were invested in merchandise, the current sales might reasonably be expected to yield the required amount before maturity of the notes. But sometimes sales are slow or made on account and the accounts not paid on time; hence it is not always possible, even by sale of current assets, to secure the means for meeting liabilities as they mature.

Why a margin of safety is needed—In most businesses current liabilities have an earlier maturity than the six-month term mentioned in the foregoing illustration, and the probability of being able to secure the required amount of cash through sales is correspondingly less. The current assets of a company ought, therefore, to exceed its current liabilities by a considerable margin; otherwise, it may have difficulty in meeting its current liabilities. A company's liabilities must be met when due if the company is to have a satisfactory credit rating and escape financial embarrassment. But even its current

assets are not always readily convertible into cash. The conservative business firm will, therefore, plan always to keep its current assets well in excess of its current liabilities.

Working capital defined—The excess of current assets over current liabilities is known in accounting as working capital. This is the technical definition of working capital, but it is usually used in the literature of finance and business management as synonymous with current assets. Thus the total capital is divided into two parts, known as working capital and fixed capital. It is also used in this sense quite frequently by business men. To avoid confusion in the following discussion working capital will be used in the broad sense to include all the current assets, and net working capital will be used to refer to the difference between the current assets and the current liabilities.

One must use care not to be misled by the discussions of financial matters in the financial pages of the daily press and in the popular literature of financial and business management. Quite often little discernment is shown by the writers of such discussions. For instance, a few months ago, it was stated in the financial columns of a large metropolitan newspaper that a certain firm had issued a large amount of notes maturing in six months and that these were issued in order to increase the firm's working capital. In the same column it was stated that the proceeds of these notes were to be used to pay maturing current liabilities. In other words, there was to be simply an exchange of one current liability for another. Obviously this did not result in an increase in working capital. A study of the balance sheet of this particular firm shows this to be true, since the current

assets were not increased by the issue of these notes. A very large inventory was carried by the firm and its inventory had been greatly increased during the months preceding the note issue. The increase in inventory gave rise to current liabilities which had not been met from the proceeds of anticipated sales, and it became necessary to issue the notes in order to secure sufficient cash to pay maturing current liabilities. No doubt the company assumed that, within another six-month period, it could convert sufficient of this inventory into cash to enable it to meet the notes when due. This is a method of financing quite frequently resorted to by business firms, especially during recent years. It gives rise to a large part of the note brokerage business.

The foregoing discussion and illustration should make it apparent that net working capital is secured either by the incurrence of fixed liabilities or by additions to proprietorship, as in the case of permanent capital, and that the remainder of the working capital is obtained from current liabilities.

26. Estimating working capital requirements

The determination of the amount of working capital required by a business is not an easy matter. An approximate estimate of its amount is, however, essential to successful financing. As in the case of permanent capital, an excessive amount of working capital is costly and wasteful; while a lack of sufficient working capital hinders the progress of a business, causes it to suffer losses, and often leads to failure.

It is apparent that the amount of working capital required by some businesses will be much smaller than that required by others, depending on the nature of the

operations performed. A business which has no inventory of merchandise and sells only services for cash or on short-time credit will need only a small amount of working capital. A business which must carry a large inventory and which sells on long terms of credit will need a very large amount of working capital. Between these two extremes there will be businesses with varying requirements for working capital. The volume of business will also be an important factor.

In addition to the general considerations mentioned in the preceding paragraph, the following factors must be taken into consideration in estimating working capital:

1. General budgetary plans of a business
2. Length of period of manufacture
3. Turnover
4. Terms of purchase
5. Terms of sale
6. Facilities for converting current assets into cash
7. Seasonal variations in business

27. General budgetary plans of business

It has been explained in Chapter I that there must be a correlation between the sales, production, and financial programs. It was there emphasized that expenditures for plant and equipment should be based on the production program, and that the production program, in turn, should be based on the sales program. In the same way that expenditures for fixed assets should be based on the sales and production budgets, so should the estimate of working capital be based on the general budgetary plans of the business. It is even more important that the various budgets of the business be correlated with the working capital requirements than that they be correlated with the fixed capital requirements, for these budg-

ets affect the amount of the working capital more than they do the amount of the fixed capital. Practically any change which may be made with reference to any of the plans of the business will affect the amount of the working capital. Increased production necessitates larger inventories of raw materials, of goods in process, and of supplies; and it requires additional funds to meet the additional labor and overhead charges. Increased sales necessitates the carrying of larger inventories, causes an increase in the amount of the accounts receivable, and requires more funds with which to finance advertising and selling programs. In each case the demand for funds is a demand for more working capital.

An advertising campaign that is either more intensive or more extensive requires additional working capital, because, more than likely, the bills for advertising will be due before the income from sales gotten by the advertising can yield sufficient funds to pay the bills. Other illustrations might be given, but those presented should be sufficient to show that the requirements for working capital are linked with and are dependent upon the general plans of the business. In other words, in order to estimate accurately working capital requirements, it is necessary to have a system of budgetary control such as that outlined in the volumes on accounting, sales, and production control.

28. Working capital requirements increase

Many business firms, in planning for increased business, take into consideration the increased plant and equipment which will be required, but they forget to plan for a corresponding increase in working capital. As Lough very aptly says: "It is an everyday occurrence

for a manufacturer to plan to put up a new building and to install new machinery that will increase his capacity, let us say, fifty per cent, and to overlook entirely the necessity for a corresponding fifty per cent increase in working capital." Of course the increase in working capital may not be in exact proportion to the increase in capacity as indicated by Lough; it may be more or less, but the idea expressed in the quotation is well worth emphasis. Successful business management is largely a matter of control and correlation, and it is very essential that the financial plans be closely correlated with the sales and production plans.

29. Length of period of manufacture

A manufacturing firm purchases raw materials and services and, by combining these, produces a salable commodity. A considerable period of time may elapse between the purchase of the raw materials and the sale of the finished product. In the meantime, the manufacturer is investing capital and receiving no return. He must, therefore, have sufficient working capital to pay all the costs incurred both during the period of production and during the subsequent period of selling the goods and collecting the sales price. The longer the period of manufacture, the greater the amount of capital required for handling a given quantity of goods. For example, suppose Manufacturer "A" produces an article requiring three months' time in process; while Manufacturer "B" produces another article requiring six months' time in process; in order to make the same volume of sales on the same credit terms during a year, Manufacturer "B" will require approximately twice as much working capital as Manufacturer "A." There are, of course, other fac-

tors which would affect such a calculation, but the foregoing statement is approximately correct.

In some lines of business, such as that of building construction, the period of production is so great that the securing of the necessary working capital is often a difficult problem. It may be many months after construction is started on a building, before it can be completed. If the company must bear the entire cost of construction until completion of the work, its financial resources will be subjected to a severe strain. Sometimes there is an agreement by which a partial payment is to be made when part of the building is completed, inspected, and approved. Such an arrangement is of material assistance to the building or construction company; but even such an arrangement does not entirely solve the difficulty, since the advances are rarely in proportion to the costs of construction and because payments on construction account are usually not made until some time after the construction work on which they are based is completed. Many construction companies have failed in the past, and their failure can usually be traced to a lack of working capital, although bad management and poor estimates of cost have been contributory factors. There is probably no business in which a system of budgetary control is more needed than in building construction.

There are many businesses in which the production process is long because of certain peculiarities of the process. In the lumber business, for example, it may be necessary for lumber to be placed in kilns to dry, and for some grades of lumber to go through a seasoning process before it is ready for the use for which it is intended. Such processes take time. They delay the

sale of the article and hence delay also the time for conversion of the article into cash. Such businesses require large amounts of working capital.

30. Production period affects sales price

The period of manufacture affects not only the amount of working capital, but it affects also the price at which the article can be sold. Capital is costly, and if it is necessary to use capital for a considerable period of time in the production of an article, the profits must, of necessity, be higher. Often it appears that firms are making an exorbitant profit, when, if the amount of capital involved is considered, it will be found that their rate of return on capital is no larger than that of other firms who, by reason of a shorter production period and lower capital requirements, can sell at lower prices. It must always be remembered that the rate of return is the important consideration, and prices must be set so as to make this rate acceptable.

31. Turnover

Working capital turnover "is the ratio of annual sales to average working assets."* Merchandise turnover is the ratio of annual sales at cost to average merchandise inventory. Both of these ratios are useful in financial management. Some writers, Lough, for instance, emphasize the importance of the former. In practice, the latter is the one most frequently used, and it is the one of most value in making plans and in checking efficiency.

The working capital of a business is invested principally in its merchandise inventory and in its accounts

*Lough, 'Business Finance'

receivable. The merchant's problem is to sell his merchandise as quickly as possible and on as favorable terms as possible, and then to collect the accounts receivable when due. He is especially interested in two things—rapidity of sales and promptness of collections. Under modern credit management the problem of sales is the principal one. The merchant is, therefore, vitally interested in merchandise turnover. He assumes that if the turnover of merchandise is high, that the turnover of working capital will also be high; and in the main, the assumption is true. However, this fact does not avoid the necessity for close attention to the collection of accounts receivable. But our present concern is with the relation of merchandise inventory to working capital.

32. Determining rate of turnover

As previously explained, merchandise turnover is the ratio of annual sales at cost to average merchandise inventory. The principal difficulty in the calculation of merchandise turnover is the determination of the average inventory. It is common practice to take one half the sum of the inventories at the beginning and at the close of the year. In some businesses this method is accurate enough, but in others it may be quite inaccurate. In some businesses the fiscal year ends when business is slack and the inventory small. For instance, a publishing company selling textbooks to secondary schools has the greatest volume of business in August and in January, immediately preceding the opening of the two semesters of the school year. If such a company ends its fiscal year on June 30 when schools are not in session, when business is slack, and when the merchandise stock is low, one half of the sum of its beginning and closing

inventories could not be accepted as its average investment in merchandise inventory. A more accurate method of determining average inventory is to take one twelfth of the sum of the monthly inventories. In some cases it is not possible to obtain monthly inventories without too much cost and trouble, but where possible they should be obtained and used.

Sometimes merchandise turnover is calculated by finding the ratio of the sales at selling price to the average inventory at selling price. This will, of course, give the same result as the method previously stated. The practice of calculating merchandise turnover by finding the ratio of sales at selling price to average inventory at cost is clearly incorrect and yields too high a rate.

33. Factors affecting rate of turnover

The rate of turnover is affected by several different factors. First, if there is to be a quick turnover, it is necessary that the goods to be sold shall be well selected. There is an old maxim, "Goods well bought are half sold," and experience has shown that there is much truth in it. If goods are to be sold quickly, they must be of good quality, and they must meet the demands of the buying public. This means, in many lines of merchandise, that very careful attention must be paid to the prevailing styles and fashions, and that, frequently, future styles and fashions must be anticipated. Very often, style goods must be purchased months in advance of expected sales; and, meanwhile, styles may change. Out-of-date merchandise clogs the shelves and ties up working capital. Leftovers, remnants, and broken lines must be disposed of in some way. Large department stores move these into their basement departments and

offer them at special prices calculated to effect quick sales. Some such measures are necessary in order to clear the shelves of unsalable goods.

The rapidity of turnover will be greater if a firm carries standard lines of merchandise; that is, merchandise which is well known and well advertised. In making a choice between the standard and the non-standard lines, there are, of course, other considerations to be taken into account, such as the margin of profit, etc.; but, from the viewpoint of turnover alone, the standard line is undoubtedly the better. If standard lines are carried, it will be possible not only to make more rapid sales, but it will be possible also to get on with a much smaller average inventory than would be required with the unstandardized lines.

34. Effect of sales policy upon turnover

The general sales policy of a firm has a very decided effect upon the rapidity of its merchandise turnover. The large department stores have probably given more attention to methods of selling goods quickly than has been given to this feature by any other type of business. The department stores have many methods by which to increase the rapidity of their turnover. It has been noted that broken lines may be moved to the basement and sold at bargain prices. On lines of goods which cannot be handled in this manner, the price may be marked down until a sale is finally effected. For instance, a cloak may be priced at \$150 when first placed in stock. If not sold within a reasonable time, it may be marked down to \$140, and, if still not sold, to \$125, \$100, \$75, or to whatever price is found necessary in order to effect a sale. The date when an article is placed in stock is indi-

cated on each article, so that the departmental head or his assistant can, by inspection, tell just how long the article has been in stock. In some stores, semimonthly inventories are taken and the length of time each article has remained in stock is indicated on the inventory report. By glancing over this report, the executive can determine which articles should be marked down. In one store with which the writer is familiar, a departmental head must dispose of all goods within six months after they are placed in stock; otherwise, the cost of any then unsold is charged against his bonus. Excessive mark-downs are of course undesirable and bring loss; but it is better to take a loss by means of mark-down than to have capital tied up indefinitely in unsalable merchandise; the older the merchandise the smaller is the amount for which it can be sold.

Turnover in manufacture—The matter of merchandise turnover is given more consideration by mercantile firms than by manufacturing firms, but it is equally as important to the latter as to the former. A mercantile firm purchases commodities and seeks, as quickly as possible, by their sale, to recover the sum originally invested in them together with somewhat more as its profit. A manufacturing firm likewise invests its money in a manufacturing plant and produces commodities, in the hope of sales at a profit.

All that has been said with reference to the factors which affect turnover in the case of a mercantile firm applies with reference to a manufacturing concern. The methods employed for the purpose of effecting a turnover are, however, likely to be very different. For instance, a manufacturing firm may take orders for goods in advance of their production and may even take orders

for goods in advance of purchasing the materials from which they are to be made. The manufacturing process may be long and hence tie up capital for a considerable period. Lastly, the manufacturer cannot sense the falling off in demands of the public as quickly as the retailer with the result that he may be caught with slow items.

Proper rate of turnover—Statistics showing physical turnover are difficult to obtain because firms do not provide sufficient data to determine the rate of mark-up. Without this rate it is impossible to obtain cost of goods sold, into which the average inventory is divided to get the rate of turnover. Because of this fact many analysts are turning to the use of the ratio found by dividing net sales by average inventory. When this ratio obtained for a single line of industry is compared with similar ratios obtained from many other lines of business, it gives an indication of the rapidity of sales and collections.

Mr. Faulk* compiled ratios of net sales to inventory for 54 representative firms in the same industry for four years, averaging the ratios obtained for each. A few are shown below:

Kind of Business	No. of Firms	Net Sales to Inventory (Times)
<i>Manufacturers</i>		
Chemicals.....	141	6.5
Clothing, Men's and Boys'..	783	12.9
Confectionery.....	103	5.0
Hardware and Tools.....	120	4.1
Millinery.....	135	16.9
Toys and Novelties.....	84	11.7
<i>Wholesalers</i>		
Butter, Eggs, and Cheese....	130	26.7
Drugs and Drug Sundries...	187	5.7
Groceries.....	387	8.2
<i>Retailers</i>		
Clothing, Installment.....	187	9.0
Clothing, Men's and Boys'..	176	3.5
Department Stores.....	616	6.0
Furniture, Installment.....	295	4.5
Lumber.....	188	3.4
Shoes, Men's and Women's..	129	5.1
Women's Specialty Shops...	422	10.0

*Roy A. Faulk, "Behind the Scenes of Business."

Chapter IV

Requirements for Working Capital — *Continued*

35. Terms of purchase

Working capital has been defined (page 35) as synonymous with current assets, and net working capital as the difference between current assets and current liabilities. It has been shown that the net working capital is obtained from long-time creditors or proprietors, while the remainder of the working capital is supplied by short-time creditors. If purchases are made on account, the net working capital may not be affected but the current liabilities will tend to increase and the amount of net working capital will be smaller in proportion to the current assets. If, for instance, a firm purchased all its merchandise on ninety-day credit, made all sales for cash, and had a turnover of something more than four, it would not need any net working capital. It could finance its purchases and expenses out of the proceeds of the sales. On the other hand, a firm which purchased for cash and sold on account would be required to have a net working capital equal to the amount of all charges to be incurred pending collection of its accounts for goods sold. Of course it might eliminate this necessity by contracting bank loans.

Usually a firm does not operate under either of these extremes, but purchases most of its merchandise on account and, if a manufacturing firm or a wholesale firm, sells most of it on account. A retail firm may make a considerable portion of its sales for cash, the amount depending chiefly on the nature of the business.

It should be apparent that the terms of purchase will have a decided effect upon the amount of the net working capital required with a consequent effect on the source from which the working capital is obtained. It is the purpose of this discussion to point out the present tendency with reference to terms of purchase and to point out also the effect of this tendency on the requirements for working capital.

Origin of cash discounts—Prior to the Civil War it was the customary practice to extend long terms of credit to both wholesalers and retailers. Since the term of credit was long, notes were often taken in payment for merchandise. After the Civil War the fluctuating value of the currency made it undesirable to take long-time notes in payment for merchandise. In order to encourage prompt payment of accounts, a liberal discount was offered for payment within a limited time after the sale. For instance, goods formerly sold on straight sixty-day account would be sold on terms of 2/10, 1/30, n/60. Business firms found it profitable to borrow money from the local banks and to discount their bills. While strong firms could borrow readily enough, the weak ones found borrowing a difficult matter, and it soon became customary to regard the discounting of accounts as a favorable sign and the failure of a firm to pay within the discount period as a sign of weakness. At present this is considered as a factor of considerable importance in determining the financial rating of a business.

Effects of cash discounts upon terms of credit—The practice of discounting accounts has led to a shortening of the terms of credit. The shorter the term of credit, the more effective is the discount offered. Consequently the "net" period has been considerably shortened in most

lines of business. The granting of extensions beyond the net date is also looked upon with disfavor. The shorter terms of credit currently offered in the United States, as contrasted with the long terms of credit offered in other countries, has been largely made possible by reason of the numerous local banks which are available to our merchants and through which the merchants are enabled to finance their operations.

Long-term credits in certain lines—In some lines of business, long-term credits are still granted. In the sale of farm machinery, it is usually necessary for the retailer to grant long-term credit to the farmer. Often the latter buys such machinery in the spring and pays for it in the autumn from the proceeds of the crops produced with the machinery. Since the retailer must extend long-term credit to the farmer, he must obtain long-term credit from the wholesaler; and the wholesaler, in turn, must obtain similar credit from the manufacturer. Consequently, in such lines of business, the credit terms allowed may be much longer than in others. In lines of business where the turnover is slow, as in the jewelry business, long terms of credit are offered.

Long-term credits in certain sections—In some sections of the United States longer credit terms are offered than in others. In the southern part of the United States the principal sales of the merchants are to farmers; because manufacturing is not carried on extensively there. The farmer's principal income is from his cotton crop; consequently the poorer farmers often have funds available but once a year. The southern merchants sell merchandise to the farmers throughout the year on credit, and make collections when the cotton crop is sold. The local merchants, therefore, obtain long-term credit from

the wholesale merchant, and the wholesaler must ask for similar credit from the manufacturer. This becomes necessary unless the wholesaler has sufficient capital to carry the burden himself.

36. Credit terms and trade acceptance

In Canada, England, and some other countries, the cash-discount method has not been employed extensively. These countries make extensive use of the trade acceptance. There has been considerable agitation for the use of the trade acceptance in this country during the past few years, but, though its use has increased, it is still not very widespread. The trade acceptance is in essence the same as the commercial draft. The vendor draws a draft on the vendee, which the latter accepts, payable at the termination of the credit period. The vendor, if in need of funds, may discount the accepted draft at his local bank. The Federal Reserve banks give preference to such drafts because they are "two-name" paper. They carry the express promise of the vendee to pay and, when discounted and endorsed by the vendor, carry also the contingent promise of the vendor. The increase in use of the trade acceptance would tend to lengthen the terms of credit; but this would not necessarily increase the working capital requirements of the vendor.

37. Terms of sale

What has been said with reference to terms of purchase applies equally well to terms of sale. A purchase and a sale are but the opposite sides of the same transaction. From the previous discussion it ought to be evident that the longer the term of credit, the greater will be the working capital requirements of the vendor and

the smaller the net working capital requirements of the vendee. It should be evident also that long-term credit has a tendency to throw a greater financial burden upon the original producer. The present tendency is to shorten the credit period and to place the burden of providing working capital upon the business which extends the credit.

In estimating the amount of working capital required, one must take into careful consideration both the terms on which goods are secured and the terms on which they will be sold. If there is a difference between the terms of purchase and the terms of sale, this will have an effect on the working-capital requirements. The greater the difference, the greater its effect; but any difference, however small, must be taken into consideration.

38. Installment sales

Installment sales are sales upon which partial payments are made. Real estate, furniture, books, correspondence study courses, and many other commodities and services are now sold on the installment plan. Many people who would never accumulate sufficient money to pay the entire cost of an article at one time, are able to buy and to pay on the installment plan. Installment sales are made under varying conditions. Sometimes the seller has no security for his claim and has only the oral promise of the purchaser to pay the stipulated installments on the agreed dates. In some cases the vendor secures the notes of the vendee, payable on specified dates. Quite commonly, the vendor retains title to the property until the installments are paid.

Financial problems of an installment sales business
—Regardless of the particular conditions under which the

installment sales are made, there is a financial problem of considerable consequence involved in a business which sells on the installment plan. Many apparently prosperous businesses have failed because the managers did not perceive the difficulty of financing installment sales. The financial problem involved in handling such sales is twofold; usually, the seller must pay the entire cost of the product which he sells shortly after he purchases it, while he does not receive the entire sales price until long afterwards. In the case of real estate, for instance, the entire sales price due from the occupant may not be received for from five to ten years after the sale is made to him. The seller must, therefore, have sufficient capital to finance his business during the period while he is waiting for payments. After an installment sales business is once established, less working capital is required, because the income from past installment sales will tend to offset current cash requirements. In a new business, however, or in an old business which is rapidly extending its sales, the cost of purchases will far exceed the receipts from installments, and consequently the demand for working capital will be large.

A secondary financial difficulty arises from the fact that it will always be impossible to collect the total installments due from customers. Even though careful scrutiny be exercised over the credit extended, there will always be customers who will default on payments. As a consequence, there will be a considerable loss from bad debts unless the manufacturer or retailer protects himself by retaining title to the property sold, and, even in this case, there will be considerable expense in securing possession of the property and in reselling it. It is necessary, therefore, that the vendor shall make his prices on

installment sales sufficiently high so as to provide for the losses which will arise from the payments which are defaulted.

Working capital requirements of an installment sales business—It is not easy to calculate the working capital requirements of an installment business, but the approximate amount can be determined.

Lough gives the following illustration of the method of calculating such requirements:

Coming back now to the financial problem of carrying on an installment business, let us take the hypothetical case of a product which sells at a retail price of \$100. We will say that the cost of the manufactured article to the retailer is \$60, the selling expense is \$20, and the overhead charges, including collection expense and bad debts, is \$10, leaving net profits of \$10. We will assume that the firm which sells this product disposes of 50 units of the articles during the first month of operations; 100, the second month; 150, the third month; 200, the fourth month; and thereafter sells regularly 200 units each month. We will assume further that installment payments are made at the rate of \$10 per month.

In order to simplify the problem we will make the arbitrary assumption that the whole \$90 outgo, including collection expense and loss on bad accounts, is incurred at the time each sale is made. Under these assumed conditions how much working capital will be required to "swing" the stated volume of business?

During the first month the outgo would be 50 times \$90, or \$4,500, and the cash receipts would be 50 times \$10, or \$500, leaving a cash deficiency of \$4,000. During the second month the outgo would be 100 times \$90, or \$9,000, while the receipts would be \$500, covering sales made during the first month, plus \$1,000 for sales during the second month, making a total of \$1,500, leaving a cash deficiency of \$7,500. Putting these and succeeding calculations into tabular form, they would be as follows:

Working Capital Requirements in Making Installment Sales

	Total Cost per Unit	Units Sold	Outgo per Month	Net Profit per Unit	No of Units on Which Col- lections Are Made	Re- ceipts
1st Month	\$90 00	X(x) 50 =	\$ 4 500 00	\$10 00	X 50 =	\$ 500 00
2nd Month	90 00	X # 100 =	9 000 00	10 00	X 150 =	1 500 00
3rd Month	90 00	X(1) 150 =	13 500 00	10 00	X 300 =	3 000 00
4th Month	90 00	X + 200 =	18 000 00	10 00	X 500 =	5 000 00
5th Month	90 00	X 200 =	18 000 00	10 00	X 700 =	7 000 00
6th Month	90 00	X 200 =	18 000 00	10 00	X 900 =	9 000 00
7th Month	90 00	X 200 =	18 000 00	10 00	X 1 100 =	11 000 00
8th Month	90 00	X 200 =	18 000 00	10 00	X 1 300 =	13 000 00
9th Month	90 00	X 200 =	18 000 00	10 00	X 1 500 =	15 000 00
10th Month	90 00	X 200 =	18 000 00	10 00	X 1 700 =	17 000 00
11th Month	90 00	X 200 =	18 000 00	10 00	X(x) 1 850 =	18 500 00
12th Month	90 00	X 200 =	18 000 00	10 00	X # 1 950 =	19 500 00
13th Month	90 00	X 200 =	18 000 00	10 00	X(1) 2 000 =	20 000 00
14th Month	90 00	X 200 =	18 000 00	10 00	X * 2 000 =	20 000 00
15th Month	90 00	X 200 =	18 000 00	10 00	X 2 000 =	20 000 00

Note: You will please note that after ten months the first month's sales price of 50 units has been fully collected. Therefore, we calculate the number of units on which collections are made during the 11th month, as follows

1700, units as of the end of tenth month, plus 200 units sold during the 12th month, minus 50 units sold during the 1st month and of which the sales price is now fully collected, = 1,850 units. Similarly we make calculations for the 12th month, and the subsequent months. The symbols in parenthesis (X), (1), etc., cross index the figures and indicate a space of time equal to ten months.

The above figures serve to illustrate what has previously been stated, that the business which sells goods on installment must plan to use a large amount of working capital during the first years of its organization and during any period of rapidly increasing sales. Unless it is possible to obtain plenty of working capital, it is dangerous to attempt to expand too rapidly. The writer knows of one installment sales business which, in one year, increased its sales 100 per cent and yet was unable to pay its regular dividend and experienced considerable difficulty in financing its operations. It faced this difficulty because the partial payments were small and the cost price of the goods sold was not fully collected until long after the sale. In the meantime, the rapidly increasing expense and cost incurred in making new sales caused a heavy drain on the financial resources of the business. After borrowing as extensively as possible from banks, the managers were finally forced to curtail sales until a certain percentage of the past sales could be collected.

39. Converting current assets into cash

The current liabilities of a business should be paid from the proceeds obtained from the conversion of cur-

*Excess receipts

rent assets. Liabilities must be paid with cash, and the other current assets must be converted into cash before they are available for the payment of liabilities. It is desirable, therefore, that current assets be readily convertible into cash. The more readily convertible they are, the smaller will be the amount of net working capital required. If all the current assets could be converted into cash immediately when desired, it would be unnecessary to have any net working capital.

Why net working capital is needed—The need for net working capital arises from the fact that some of the current assets cannot be immediately converted into cash and that some of them are likely to be entirely unconvertible. For instance, it may be found impossible to collect some of the accounts receivable until long after they were contracted; and a certain proportion of them will be uncollectible. Again, it takes time to convert merchandise in stock into cash; and some of it may prove salable only at greatly reduced prices. In other words, current assets may prove to be not liquid; while current liabilities always are liquid. It is necessary, therefore, to have at all times a considerable excess of current assets over current liabilities and to have also the current assets in such form that they can be converted as readily as possible. In the case of merchandise stock, its convertibility can be increased by exercising care in manufacturing and in purchasing. Its liquidity can also be increased by preventing the accumulation of unsalable stock. This can be avoided by a careful inspection of stock and by the use of mark-downs. The liquidity of accounts receivable can be increased by care in the granting of credit and by exercising diligence in the collection of accounts.

Securing loans on accounts receivable—Until recently there was no method by which funds could be gotten from accounts receivable except by collection from the debtors; but in recent years, discount companies have been organized. These companies discount accounts receivable much as banks discount notes receivable. Most business firms, however, avoid the discount companies. There are two reasons for this: first, the discount companies charge a very high rate; second, customers become suspicious if they find that their accounts have been assigned to a discount company, and the borrower, therefore, loses business.

In some cases, when accounts are assigned to a discount company, the firm making the assignment collects the accounts and turns the proceeds over to the discounting company. This may prevent the customer from knowing that his account has been assigned, but it does not lessen the high cost of obtaining funds by this method. The discount companies do business mostly with the smaller mercantile establishments. The conditions and terms under which assignments may be made vary widely. Gerstenberg* gives the contract as typical of the agreements made in such cases:

For Value Received, we, the undersigned, have bargained, sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over unto L. SPIEGELBERG AND SONS, their successors and assigns, the claims and accounts more specifically set forth in the statement annexed hereto and made part hereof, which is a copy of the original claims and accounts, assigning, transferring, and conveying to the said L. SPIEGELBERG AND SONS all our right, title, and interest in and to the same

*Gerstenberg, "Materials of Corporation Finance"

and in and to the merchandise, the sale of which created said accounts with full power to reclaim said merchandise as heretofore stated.

To Have and to Hold the same unto L. SPIEGELBERG AND SONS, their successors and assigns, and we hereby constitute and appoint said L. SPIEGELBERG AND SONS our true and lawful attorneys irrevocably in our name or otherwise but to their own use and benefit to collect and receive all moneys due or to grow due upon said accounts, and to collect, sell, assign, transfer, set over, compromise, or discharge the whole or any part of said accounts and to receive, reclaim and without notice to us, to dispose of the merchandise, the sale of which created said accounts (in the event that for any reason said merchandise in whole or in part shall come back upon said accounts) and for those purposes to do all acts and things necessary or proper in the premises. This assignment is made for due and valuable considerations, having been paid to the undersigned by L. SPIEGELBERG AND SONS, and also is made in furtherance of an agreement about to be made between the undersigned and L. SPIEGELBERG AND SONS and as further collateral security for the payment of any indebtedness arising as a result of said agreement and otherwise.

We Hereby Guarantee payment of said accounts at maturity and hereby represent that the accounts so assigned are just and true and are the result of bona fide sales and that the merchandise, the sale of which created the accounts hereby assigned, belonged to us solely and absolutely and was not in whole or in part consigned to us and that the debtors therein named have agreed to accept the same; that no payment has been made on said accounts; that there are no set-offs or counter claims thereto and that the terms of credit are as specified and that any and all remittances on said accounts coming direct to us shall be received by us in trust for L. SPIEGELBERG AND SONS only and that the identical remittances in whatever form they may be received by us shall immediately be handed over to L. SPIEGELBERG AND SONS and that all deductions on

said accounts will be made good by us to L. SPIEGELBERG AND SONS by payment of the same in cash or by payment of the same out of any balance to our credit in the hands of L. SPIEGELBERG AND SONS, if any, and should the purchasers reject, return, or refuse to accept any or all of the merchandise mentioned in said accounts, that we will immediately give notice thereof to L. SPIEGELBERG AND SONS and it shall then be optional with L. SPIEGELBERG AND SONS to surrender to us the said merchandise refused, rejected, or returned upon receiving payment thereof in cash or, if they so elect, to deduct from any balance which they may have on hand or out of any sum which they may thereafter have on hand to credit the amount of said merchandise.

The said representations are made to induce MESSRS. L. SPIEGELBERG AND SONS to make advances to us on the faith of the said accounts herein assigned by us.

The said accounts so assigned by us shall in the event of the undersigned making an agreement with MESSRS. L. SPIEGELBERG AND SONS for further advances on other merchandise become part of the accounts under said contract and shall be treated in the same manner as provided for in said contract.

In Witness Whereof, Company
has hereunto set its hand and seal this day of
December, 19

By

40. Working capital to provide for seasonal variations

In some lines of business the sales are seasonal, and the amount of merchandise stock which must be carried and the expenses which must be incurred vary greatly during the year. As previously stated in the case of a company selling textbooks to secondary schools, the peak of sales is usually in January and August; hence it is necessary, twice each year, to have a large inventory to

meet these sales. The clerical force employed at the time of assembling the inventory and shipping the goods sold is much above normal. The working capital required by such companies during the period of greatest sales is very much more than is needed by them during the remainder of the year. Every business having seasonal sales has this same experience. During the period of heavy sales, a greatly increased working capital is required. The problem which confronts the managers of a seasonal business is that of providing adequate capital for the period of heavy sales without being obliged to bear excessive interest charges for an over-supply during the period of light sales.

Two methods of meeting seasonal demands for capital—There are two methods by which a business may meet this situation:

1. The business may provide permanent working capital sufficient to meet its normal needs during the period of light sales and borrow the additional capital needed during the season of heavy sales from local banks. Money is borrowed from the bank, presumably, just as it is needed and is repaid as soon as it is recovered from the sale of the merchandise stock in which most of it has been invested. By this method the business is required to pay for the capital only during the period when it is needed. Although this method may seem economical, it is not always the most prudent. The financial market, at the time the money is needed, may be such that the necessary money cannot be obtained by means of bank loans. This may result in serious financial loss and possibly in insolvency. If a business arranges in advance with its bankers for the credit it will need, it should not have difficulty in supplying its seasonal capital needs.

2. The business may provide permanent working capital sufficient to meet its needs during the period of

greatest sales, and invest its excess funds, during slack periods, in the stocks and bonds of other companies. If such stocks and bonds have a ready market, this method ensures sufficient working capital to meet the needs of the business at all times. It has certain disadvantages, however. Stocks and bonds are continually fluctuating in value, and sales, to get cash when most needed, may have to be made at a loss. In case of a general financial stringency, securities of all kinds sell at a disadvantage, and a firm may find that the capital invested in its securities is unavailable for the payment of its debts. The income which can be obtained on securities purchased for only a few months is likely also to be less than the business would have to pay on its own indebtedness. Consequently the investment of surplus funds in the stocks or bonds of other companies during slack periods may not be profitable.

Steering a middle course—Probably the wiser plan for a business with seasonal sales to follow is to have a liberal working capital, somewhat more than is needed in the slack season and somewhat less than is required in the rush season. Under these circumstances it will be necessary to borrow some funds from banks when the sales reach the peak; but this is not likely to be an abnormal amount, and, if proper relations are maintained with the bank, the requisite amount can be readily obtained as needed, unless in time of panic or extreme financial depression. This method will, of course, necessitate some loss because of the excess capital held during the slack periods. But such losses should be borne as inevitable incidents of business. The selling price of the commodities handled must be adjusted to cover all such losses and the anticipated profit.

A study of various balance sheets indicates that most businesses do not invest surplus funds in stocks

or bonds. Most of them depend on bank borrowings to meet temporary demands for capital as required. In case of firms whose business does not fluctuate greatly in volume, such a plan is usually satisfactory; but where the volume of business fluctuates greatly, it is not prudent to depend exclusively on bank borrowings—the wiser policy being then to provide part of the additional requirements from permanent capital. The amount to be so provided will depend on the circumstances of the particular case.

41. Amount of working capital required

The amount of working capital which a business should have will, of course, depend on the nature of the business and the volume of business which is to be financed. Little has been done toward determining the amount of working capital which a business should have. It is impossible to give arbitrary rules which would govern, but certain approximate standards might be set up which would serve as guides. At present, however, each firm must usually guess its requirements without even a knowledge of the experiences of other firms to assist it in making the guess.

Two-to-one ratio — Bankers frequently insist that the balance sheet of a client seeking credit shall show a two-to-one ratio between current assets and current liabilities. They hold that the current assets of the business should be at least twice its current liabilities, or, to state it another way, that the net working capital should be equivalent to its current liabilities. This two-to-one ratio has been insisted upon by banks because it was thought that this ratio provided a sufficient margin of safety between current liabilities and current assets. It was assumed that at least fifty per cent of the book value of

the current assets could be liquidated and be thus made available for meeting the current liabilities. In the past, bankers have applied this two-to-one ratio rather arbitrarily and often have not made sufficient allowance for the type of business or the nature of its operations. A rule which will be applicable to all types of business cannot be established, for some businesses will require two or three times as much working capital as will be required by others, and the same business will require a variable amount of working capital at different stages of the business cycle.

There is great need for a study of the requirements for working capital in the different lines of business and for the establishment of standards of capital requirements which may be used for the guidance of new concerns during the period of organization. Comparatively little organized investigation has been carried on in this field of business research. Such studies as have been made might serve possibly to indicate a very profitable field of research work for students of business finance. It is to be hoped that the field will be developed in the near future.

42. Estimates of working capital

The purpose of this discussion is to emphasize the necessity of making estimates of working-capital requirements and the formulation of plans to meet these requirements. While some of the factors involved in making such estimates have been stated and explained, it is impossible to state reliable arbitrary formulas. It is also impossible to determine the amount of working capital required in any particular case with any more than approximate accuracy. However, plans which are approx-

imately correct are better than no plans at all. It is very desirable, therefore, that estimates be made.

Because of the difficulty of making correct estimates, it is desirable that they be made for relatively short periods of time. By this method it is possible to make changes in the estimates as the changing business conditions indicate the need for revision. The method of estimating current cash requirements will be explained in a subsequent chapter.

Chapter V

Conservation and Reclamation of Capital

43. Need for conservation and reclamation

It has already been shown that the primary step in establishing a system of financial control is the formulation of a financial plan or program and a determination of the capital requirements of the business. Without pre-planning, no rational financial control is possible. The capital requirements of a business are dependent to a considerable extent upon how effectively the capital which it has will be used. The more rapid the turnover, the smaller are the capital requirements. To employ capital effectively, two things are necessary:

First: Conservation must be practiced in its use, that is, capital should be invested only in income-producing commodities or services, and those commodities and services should be such as will produce the maximum income in the minimum time. It is possible, by a proper use of capital or, in other words, by a proper policy of conservation, to avoid, to a large extent, the improper investment of funds.

Second: A proper policy of reclamation must be practiced so that money which is invested in commodities or services and which does not produce a satisfactory income can be reclaimed and properly invested. No matter how careful a control may be exercised, some capital will become tied up in unprofitable assets.

44. Methods of conserving and reclaiming capital

Methods of conserving and reclaiming capital vary with the nature and activities of the business in which they are to be employed. The most significant methods may well be considered under the following heads:

- | | |
|---------------------------|------------------------|
| 1. Production | 5. Shop expenses |
| 2. Purchases | 6. Commercial expenses |
| 3. Materials and supplies | 7. Finances |
| 4. Labor | |

45. Capital invested in productive operations

It is not an uncommon occurrence to find that the amount of goods produced varies from the amount needed. Whether the amount is above or below the required amount, the difference is usually due to a lack of planning ahead sufficiently well to meet the needs of the business. The manufacturer, who, through a lax policy, produces more than he can profitably sell, does not secure the most effective results from his investment. The money which is tied up in surplus inventory could be better employed in some of the other operations of the business or used in meeting the liabilities of the company.

If the production program has been exceeded, the manufacturer's only recourse lies in reclaiming whatever surplus has been produced. If possible, the sales program should provide for its early disposition. If it cannot be sold in its present form, it may be possible to reclaim it by salvaging and reworking the finished parts for use within the plant or for sale.

On the other hand, insufficient production may have been due to improper planning; sufficient funds were not provided or were diverted to less profitable uses. This

may mean a failure to fill orders and a consequent loss of business. If funds have been injudiciously used, it may be necessary to obtain other funds in order to meet the production program. In any event, the want of planning and control involves a loss.

Need for executive control of planning—To prevent such losses it is necessary that there be some executive who is responsible for co-ordinating the estimates prepared by the several department heads and supervising the execution of the budgetary plans of the business. In this discussion this executive will be termed "controller." The terminology of business management is not exact and different terms will be used in different businesses to refer to executives who perform the same functions. Also, the administrative functions are classified differently in different businesses. The most that one can do is to define the terms used and follow the definition given consistently. The controller will require estimates of the probable output of the production department. These estimates will be based upon past experience and general business conditions and, when considered in connection with similar estimates (or reports) from other departments, especially the sales estimate, will enable the administrator to plan for a more efficient use of the plant.

With the assistance of the head of the production department and with the aid of progress reports, the controller can keep in touch with the work of that department and can make any needed adjustments in time to prevent serious loss. It may seem a needless duplication to have both of these men watching the production schedule; but it is to be remembered that these men are looking at the problem from different view-

points, and that it is only by a correlation of the different interests represented by them that a successful production program can be developed.

Use of progress reports—These progress reports combined with the original budgetary plans will afford, as the minimum, a statement of the production quota, the amount of goods actually produced, and the excess or deficit as compared with the standard. From these data, the controller can readily determine not only any variation from the original program, but also what changes, if any, should be made in it. Furthermore, as will be explained later, the controller is thus put in a position to handle to better advantage the questions which come to him from other departments.

Handling special orders—Another problem which arises in the process of securing the greatest efficiency in the use of capital for production purposes is that of how to handle special orders. Frequently, a business takes on work of a sporadic nature and thus greatly increases the temporary need for capital. To avoid the common mistake of manufacturing more than is necessary in the hope that the residue can be disposed of, conservation requires an estimate of the probable orders. While such estimates may lead to a check upon this particular phase of the production activities, in the long run it will be an advantage because it will tend to stabilize the company's capital requirements.

Balanced production helps society—Financial management recognizes the relationship of each particular business unit to the entire financial organization of society, and, by conserving the capital requirements of the several business units, promotes stable business conditions generally.

Production is one of a number of functions. These functions, because of their variable nature, will conduce to slipshod methods in the appropriation of a company's funds if they are not kept under proper control.

46. Capital invested in purchases

Another opportunity for the misapplication of funds exists in the field of purchasing. Failure to plan ahead and to make a sufficient investigation of the needs of the business and of the condition of the market frequently leads to the purchase of inappropriate or unusable goods.

Information required by purchasing agent—Many firms do not possess a purchasing department with power to investigate the market beyond the requirements for effecting an actual purchase. Even where the purchasing department has a recognized place as one of the administrative functions of the organization, it often does not attempt to do more than to issue purchase orders in accordance with requisitions of the production department, and it trusts to the firm's credit standing to complete the purchase.

A purchasing department should not only do these things but should also be at all times in intimate touch with the production department and with the general market. The head of the purchasing department should anticipate the wants of the production department. He should know in general the quantity and quality of materials required, and the times when they are to be supplied.

Research bureau is needed—For best results, the head of the purchasing department should maintain a research bureau through which to watch the market conditions and movement of prices, especially as relating

to the materials which he is to purchase; and he should be able to apply the knowledge thus acquired. The cost of instituting and developing a research bureau may easily be covered in a short time by the prevention of excessive or unusable purchases.

Co-ordination of purchasing and production departments with financial department—The co-ordination of the purchasing and production departments with the financial department of the business requires a comprehensive system of reports and statistical data. For one thing, it will call for a classification of the purchases accounts from various points of view—by items, by terms of purchase, and possibly also by departments. The first arrangement, obviously, gives a check on excessive purchases of any one particular class of items. A classification by terms of purchase tells the financial manager when payments are to be made. And a classification by departments provides a basis for determining the needs of the various departments from period to period.

Purpose of a buying budget—A buying budget simplifies the task of the executive in making comparisons of the relative needs of the different departments and in deciding upon the course of action to pursue when called upon to sanction any modification of the original budgetary program. The use of such a budget does two things:

1. It forces the purchasing department to organize for more efficient service; and
2. It sets limits to the amount of funds which the purchasing department may safely obligate the company to pay. It is thus a protection to the financial department against requisitions for more funds than were allowed under the original budget.

In order that the manager of the financial department, usually termed the "treasurer," may make the best use of the company's funds and stabilize the company's credit, it is essential that he should be supplied with frequent reports on commitments for goods ordered and the dates when payments are to be made. Thus it is that when the purchasing department is made an active participant in the formulation of the company's budgetary program, based upon research instead of upon guesses, the manager of the financial department acquires additional assistance for an efficient use of the funds entrusted to his care.

47. Capital invested in materials and supplies

Materials and supplies used in production involve the investment of capital and, from this point of view, require to be studied in much the same way as the larger topics of production and purchases. The use of materials and supplies affects the unit cost of products and therefore raises new questions in the cost accounting work, but it presents the same problems of over or under investment as in the cases above considered.

Keeping inventory down — There are, doubtless, times when it is advantageous to a company to have a large store of materials and supplies; but such a condition should be allowed only upon special executive authorization. The point below which the stock must not be allowed to fall will, of course, be fixed by the establishment of minimums. This policy, instead of being ultra-conservative, is in fact liberal, for it conduces to the most effective use of capital. It forestalls the tying-up of capital in supplies and materials for which there is no present use; and it avoids losses from deterioration.

obsolescence, shrinkage, and waste, besides saving needless expense for storage, supervision, insurance, and taxes.

Reduction of excess inventory—Where an overstock of materials and supplies is found, it is essential, first of all, to stop further purchases until in the regular processes of production the stock is reduced to the normal. In extreme cases, it may be advisable to make sales of a portion, even though such sales have to be made at less than cost; for it may easily happen that the losses incurred in this way may be more than offset by savings in expense and by the gains which will accrue from a better use of the capital invested in them.

Essentials for effective control—A constructive program for the handling of materials and supplies will require a thorough classification of the different materials used in productive operations and would involve the setting up of classified accounts to cover all the various raw materials, the assembled materials, the production supplies, miscellaneous supplies, containers, labels, etc. In general, the principle that the amount of supplies should be governed by the production expectancies holds good for all these factors, but the means of control in these cases is through a balance of stores sheets showing maximum and minimum quantities to be kept on hand.

A balance of stores record will show the quantity of materials ordered, the quantity on hand, the quantity appropriated or reserved, and the quantity available. With the aid of this record the stores keeper is prepared with proof of the required control over investments in materials and supplies.

Conservation is a method of saving—It must not be expected that the conservation of capital by the method

emphasized above will necessarily yield immediate profits. Its benefits are to be sought for rather in the future prosperity of the business. The benefits of conservation will be reflected in decreased waste rather than in increased profits. The saving on any particular item may be small, but in the aggregate these savings may easily amount to a quite considerable sum and materially increase the profits of a business.

48. Reclamation and conservation of labor

In the foregoing discussion the necessity for an effective control of the capital invested in materials and supplies has been emphasized. But the capital employed in providing labor purchases a service rather than a commodity, and the profitableness of the investment will depend quite as much upon the measures taken to keep the laborers in condition for service as upon the uses to which the service is applied. In many plants, the expenditures for the purpose of maintaining favorable conditions—usually called welfare work—amount to a considerable sum, and it becomes highly important to know that the best possible use is made of the funds so employed.

Considerations of human element involved—Since the particular problem here discussed has its human as well as its accounting and financial aspects, it may be well to suggest some of the ways available for securing the desired results. Whether the policy to be worked out in that connection is a matter of industrial management or personnel control, the essential part of the program will lie in the selection of desirable workers, the assignment of these workers to jobs corresponding to their abilities, and the maintenance of a stable, efficient,

and reliable labor force. To this end, it is essential not only to make proper selection of workers and to maintain fit working conditions, but also so to compensate, so to instruct, and so to advance the workers from time to time, as their abilities and the needs of the business require, that the labor force may be taken into account as an integral part of the business rather than as a foreign element to be used and thrown away. This involves a more or less constant shifting and promotion of employees to meet both economical and psychological demands, and it means that dismissals and withdrawals must be reduced to the minimum in order that the heavy costs of securing and of training new workers may, as far as possible, be avoided.

These suggestions are not made in any attempt to solve the labor problem. That problem has phases that need not and cannot properly be taken up in a discussion of the ways to conserve capital. The suggestions are aimed only at the more obvious and more readily rectifiable mistakes in labor administration. For example, considering the amount which it costs to employ a laborer, is it not worth the effort to make every attempt to hold him in the organization? Even if a business has no call or inclination to establish a liberal labor program, it can well afford, while considering the reduction of waste of materials and the adoption of more effective methods of production, to consider also methods of eliminating unnecessary waste in the employment of workers. A limit may be set on the amount to be spent for labor administration, or an estimate may be made of the probable labor costs and a quota allowed which will vary somewhat with the size of the force. Whatever method is taken, it should be embodied in a formal budget and

should be made subject to the scrutiny of the controller and other executives.

What labor budget covers — The making of the labor budget will involve at least a consideration of the normal or past requirements of the plant and a knowledge of future production plans and market conditions. Direct labor has a tendency to increase in proportion to production; and unless the financial manager is supplied with reliable reports on the probable labor needs, he cannot be expected to meet the capital requirements of a variable pay roll without more or less waste in providing for contingencies that may never happen.

Pay-roll control—From the viewpoint of financial management there are two kinds of pay-roll control:

1. The accounting control—which will include time tickets, showing the amounts paid to each individual, and job cost sheets, indicating the labor charges on each job or for each department.
2. The statistical control—which will include weekly reports showing the actual amounts spent, together with a statement of the purpose of the expenditures as related to the production schedule, and comparative reports for different periods for different plants, and for the various production expenses and various grades of labor.

To ensure the best possible use of capital appropriated for labor requires a co-ordination of the different departments and a control of the amounts disbursed fully as comprehensive as in the case of the items previously considered.

49. Reclamation and conservation of shop expenses

Shop expenses, including indirect material costs, indirect labor costs, and the cost of the other services necessary to production which are under the direction of

the production manager, cannot be estimated as a lump sum. As production increases, shop costs will usually be increased. This condition lays upon the production manager the necessity of having his production program well in hand so that he may correctly estimate his shop expenses. Once these steps have been taken, plans for securing capital will be in order.

The capital requirements having been made, the controller may plan an administrative policy such as will secure the greatest returns from the funds appropriated for meeting shop expenses. A classification and analysis of costs will facilitate a determination of these expenses, because it will fix responsibility in definite departments, and so promote a correlation of these costs of the plant with the resources of the financial department.

A classification of shop expenses is difficult to determine for various reasons. Many of these costs are estimates only, depending on the progress of the production program; many are incurred in small amounts difficult to calculate beforehand; and some, as depreciation and insurance, are of an intangible nature.

Granting the necessity of such a classification, a report on these items in the hands of the controller will be invaluable as a means of comparing: (1) estimates and results; (2) expenses and production—a comparison that will be materially helpful in planning to reduce expenses in the future; and (3) expenses in various departments.

50. Capital invested in commercial expenses

To one concerned with securing the best results from the capital invested, the expenses that are incurred in the selling of goods, that is, in those operations which

take place after the manufacturing process is completed, present certain interesting problems.

Real problem is one of method—It is always to the company's interest to keep such expenses as low as possible; and the difficulties which arise are difficulties of method rather than of principle. Certain expenses, such as traveling expenses, and expenses for telegrams, telephone, care, water and light, professional services, etc., are difficult to estimate ahead of time. Again, after they are determined, they must be allocated. As to certain fees, such as attorney's and accountant's fees, the uncertainty in amount may sometimes be avoided by placing them upon a retainer basis. As to those expenses which cannot be so provided for and which cannot be estimated, authority to incur them should be vested only in the chief executive, or controller. The budget method will be useful in handling traveling and other like expenses; and, at the end of each financial period, the amounts may be distributed, or apportioned, to the various departments concerned, as selling or other overhead expense.

At first glance, this may appear to be an overly minute practice of the principle of conservation. Yet in an organization of any size the expenses that occur through the careless use of telephones or the unauthorized use of funds for traveling purposes, and the like, may and do accumulate into items of considerable proportions. It reflects no particular glory to a company that it has earned the reputation of letting its salesmen spend money freely. Whatever the policy of the company is with reference to allowances for the road, a reservation should be made in the program to the effect that all expenses should eventually come under the scrutiny of the controller.

Skeleton income account—Assuming the necessity of controlling these less tangible expenses, the task becomes one of analyzing and classifying the accounts so as to secure the most effective control. A skeleton income account, indicating some of the more common expense items, as in the outline presented here, will enable anyone more readily to see the relation of the various expenses to the ultimate result:

- A. Gross sales
- B. Cost of goods sold
 - 1. Inventory at beginning of period
 - 2. Purchases
 - 3. Inventory at end of period
 - 4. Materials
 - 5. Labor
 - 6. Manufacturing expense
- C. Gross profit on sales
- D. Operating expenses
 - 1. Selling
 - a. Packing and shipping
 - b. Salesmen's salaries and expenses
 - c. Sales office expenses
 - d. Advertising
 - 2. Administrative
 - a. Sundry
 - 1. Traveling
 - 2. Telegrams and telephone
 - 3. Car fare
 - 4. Water and light
 - 5. Fees
 - b. Overhead
 - 1. Executive offices
 - 2. Salaries of directors
 - 3. House organ
 - 4. Professional fees
- E. Net income

Increased sales may mean less profits—It will be seen that many items operate to reduce the gross profit and to make the final net income an amount much less than might have been expected from a consideration only of the total sales. This suggests a frequent mistake in business management. Many executives deceive themselves into thinking that as long as gross sales have increased they are safe. But the cost of securing the increase may more than offset the profit derived from it. The controller should look to the relation of the operating expense to the gross revenue and should test the effectiveness of the firm's selling and administrative methods.

Budgeting administrative expenses—Budgets are a necessary means of control in administrative as well as in other departments of a business; and estimates of administrative expenses should be made as accurate as possible. The probable overhead expenses may be calculated as a certain per cent of production costs, or of sales; or the ratio of overhead to unit cost may be determined. In so far as the management must control its own expenses, it is of course checking up on itself. This may be a limitation on the effectiveness of the monthly-report policy, yet, once it is recognized as a limitation, it is for the management to make every effort to establish as accurate control here as it requires in any other field of expenditures.

The importance of controlling commercial expenses is due to their influence upon the gross profits. It is the duty of the management to make as accurate a classification as possible of these expenses in order that the estimates and reports may be useful as a means of control. To achieve this purpose, it is necessary to consider these expenses in relation to the entire organization.

51. Reclamation and conservation of finance

It may appear paradoxical for the financial department, which attends to the expenditures for the business as a whole, to have its own field controlled. There is, however, nothing inconsistent in this nor is there anything peculiar about its workings; and the management, if it is to be efficient, must have full information concerning the disposition of cash and the use of credit. This measure of control is maintained in every organization which understands its intra-plant relationships and their proportions.

The question of control over cash and credit will be taken up in later chapters. Here, by way of conclusion, it is to be noted only that once limits on cash and credit are set, authority may be continuously exercised through the use of reports. Monthly and weekly reports from branches and departments can be made to show the amount of cash paid out or of credit extended. These reports, considered in connection with the purchasing department's reports, let us say, will test the sufficiency of the budget made at the beginning of the period. Other reports on the percentage of uncollected accounts or on the amount of discounts offered and taken will materially assist the financial executive in the administration of his work for the rest of the period. In other words, the policy of conserving capital has as its basic principle an analysis of the departmental functions and the linking together of the departments on the basis of these functions. It is not so much a policy of reducing the amount of capital used as it is of applying, in the most effective manner possible, those resources which are deemed necessary for the success of the enterprise. In the last analysis, that can be accomplished only by estab-

lishing authority and by recognizing it in the preparation and use of reports.

52. Summary

Looking back over the suggestions just made, one may see that the essential idea is to establish the need for controlling the capital determined upon for use in the business. It is to be hoped that the importance of efficiently utilizing the financial resources of the business is appreciated. It is one thing to plan the amount of capital which should be used during any given period, but it is quite another thing to secure the greatest possible return from the capital after it has been secured. This return may be obtained in two ways: (1) by investing it in income-producing services or commodities; and (2) by reclaiming for more useful purposes whatever capital has been misdirected in that behalf.

In production, it should be the management's purpose to produce no more than is needed and yet, as nearly as possible, to come up to the quota. The practice of conservation in purchasing means that a new conception of the function has been developed, namely, that of investigation and planning before buying. It should be a fundamental purpose of the purchasing department to think out, in detail, the consequences of a proposed contract before closing it rather than to run the risk of an overstock or of an unsalable stock of goods. Materials for production need to be bought with an eye to the production budget and not with a vague hope of using them sometime in the future.

Where human relations are involved, as in the field of labor, every attempt should be made to see that the amounts spent for wages or for welfare work are used

effectively. No matter how visionary the management may be in regard to its working force, it still cannot afford to be careless in the application of funds in this connection. When shop and commercial expenses are well considered, they bring to light the importance of guarding very closely those small and indefinite items that can slip beyond their budgetary limits without the management being aware of their accumulation until it is too late. Finally, the expenses in the financial department must be controlled as expenses in other departments are controlled, if its executive is to practice in his own department the principle of securing the greatest results from a given amount of capital which the departments whose funds he handles are required to practice.

Administration in its final analysis consists largely in placing the several departments in the proper relation to each other and to the business as a whole, and in reducing the unit cost of doing business to a minimum. In this behalf, reports and estimates are of the first importance. Unless the expenditures of a business are properly planned and controlled, the exercise of its functions will involve either excessive capital requirements or inferior results. To have attained a high utility of the funds of a business means that interrelationships have been recognized and that authority has been centralized.

This discussion has been injected at this point because it is essential for the student to see that the amount of capital which will be required is dependent to a considerable extent upon how effectively the capital secured is to be used.

3. Sources of Capital

Chapter VI

Segregating the Data

53. Capital sources and volume of capital

In planning the financial structure of a business the first step to be taken is a study of the financial needs. This in turn will show the capital requirements and upon a basis of the indicated volume a plan can be devised for raising the amount of money necessary. A source of great difficulty to many businesses lies in inadequate planning where financial needs are concerned and they find themselves either with too much capital upon which they are forced to pay interest charges or with too little capital which hinders the smooth operation and development of the business.

There are various sources of capital and to some degree these are distinguished by the type of loan and the amount of money to be obtained. The methods employed in raising small amounts of money are quite different from those wherein large sums are necessary, and the costs and effort involved in major financing are unnecessary and would be extravagant for the raising of comparatively minor amounts.

The chief point to be observed in the foregoing paragraphs is the necessity for knowing to as great a degree of accuracy as is possible the amount of capital that will be necessary for a business. There is another consideration, and that is the purpose for which the capital is to

be used. The factors involved in estimating fixed and working capital requirements have been discussed in earlier chapters.¹

The short-term creditors of a business also play an important part in the supplying of capital, and money obtained in this way must be distinguished from loans obtained on long terms.

Besides the fixed capital and net working capital there are current assets, as net working capital consists only of those current assets in excess of current liabilities. Here is where business relies upon short-term credit.

54. Illustration of source of capital

The foregoing discussion can be made more intelligible by an illustration of a simple balance sheet. It may be assumed that the financial condition of the X-Y Company on December 31, 19 , as shown by its balance sheet of that date is as follows:

X-Y Company

Balance Sheet, December 31, 19

CURRENT ASSETS		CURRENT LIABILITIES	
Cash	\$18,050.00	Notes payable	\$25,000.00
Notes receivable	1,260.00	Accounts payable	<u>32,000.00</u>
Accounts receivable	46,450.00	Total current liabilities	\$57,000.00
Merchandise inventory	<u>110,240.00</u>		
Total current assets	\$176,000.00	FIXED LIABILITIES	
		Notes payable (10-year)	\$30,000.00
FIXED ASSETS		Mortgage payable	18,000.00
Office equipment	\$4,770.00	Bonds payable	<u>42,000.00</u>
Machinery and equipment	86,230.00	Total fixed liabilities	90,000.00
Buildings	93,000.00		
Land	<u>117,000.00</u>	NET WORTH:	
Total fixed assets	301,000.00	Preferred stock	\$100,000.00
		Common stock	150,000.00
		Surplus	<u>80,000.00</u>
		Total proprietorship	330,000.00
Total assets	<u>\$477,000.00</u>	Proprietorship and liabilities	<u>\$477,000.00</u>

¹cf. Ch. II, III, and IV and especially p. 36.

In the balance sheet of the X-Y Company current assets are shown at \$176,000 and current liabilities are shown at \$57,000. The net working capital is, therefore, \$119,000. The fixed assets are \$301,000 and the total of the fixed assets and net working capital is \$420,000. Looking on the liability side of the balance sheet it is seen that the fixed liabilities are \$90,000 and the net worth is \$330,000, and the total of the two is \$420,000. The source of the fixed assets and net working capital is thus readily seen. The total assets of the X-Y Company are \$477,000, or \$57,000 more than the total of the fixed assets and the net working capital. This \$57,000 has been supplied by the short-term creditors, as shown by the notes payable and accounts payable items on the credit side of the balance sheet.

Working capital is a variable quantity—The foregoing illustration should not confuse the student and let him feel that there is an exact division between the capital supplied by the proprietors and the long-term creditors, and that supplied by the short-term creditors. The division comes only in the method of obtaining the funds. The amounts themselves are constantly shifting. The obtaining of new funds may involve a shift in position on the balance sheet. This would change the relationship between the long and short-term obligations and affect directly the entire financial structure of the company. For example, it may be found desirable to pay off large amounts of the current liabilities and at the same time the managers of the company may wish to increase net working capital. Both these aims may be accomplished by using funds obtained from long-time obligations. Many examples of the foregoing operation can be found, and it is apparent that there is a constant fluctua-

tion in the net working capital of a business. Actually the nature of the company's liabilities has changed with a resulting transformation of its net working capital. The same situation would arise if changes in the assets of a business become transferable. In consequence a business can make only an approximate estimate of its net working capital requirements during any fiscal period.

Maintaining working capital—The constant shifts taking place in the capital structure of a business are in themselves a sufficient reason for control methods which are necessary in this type of work. Funds might be obtained and used in ways that would not be considered acceptable under the rules of good management unless a method were employed for keeping the financial operations under constant observation. An undesirable situation in a given section of the business might be completely hidden and fail to come to light because of the employment of funds obtained and used improperly.

When bonds reach maturity it is a mistake to meet the obligation with short-term funds borrowed from the bank. If this is done it causes confusion through the substitution of a short-term for a long-term loan with the result that the net working capital is decreased through an increase of current liabilities. The payment of these new notes is made more difficult because the business may be placed at a disadvantage in obtaining further funds. Another confusion in the use of funds is the employment of short-term notes in payment for capital investments in the form of additional machinery. This is considered unsound practice unless it expedites the employment of new machinery which would not have been possible at such an early date if directly financed by long-term funds. As a result refinancing would become necessary and dur-

ing the interim period the issue of such notes would have brought about a decrease in the net working capital. The foregoing examples show conclusively that in order to prevent some indirect disadvantage from coming to the business the exact amount of capital necessary and the purpose to which it is to be put must be determined and the method of obtaining it properly selected.

55. Classes of contributors to capital

From the illustration and discussion of the balance sheet of the X-Y Company, it can be seen that the capital with which a business is conducted may be obtained from the following sources:

1. From those in whom the proprietary interest is invested
2. From the long-term creditors
3. From the short-term creditors

In a corporation, the proprietors or stockholders supply capital in two ways:

1. By purchasing stock of the corporation
2. By leaving in the business the profits which the business has earned

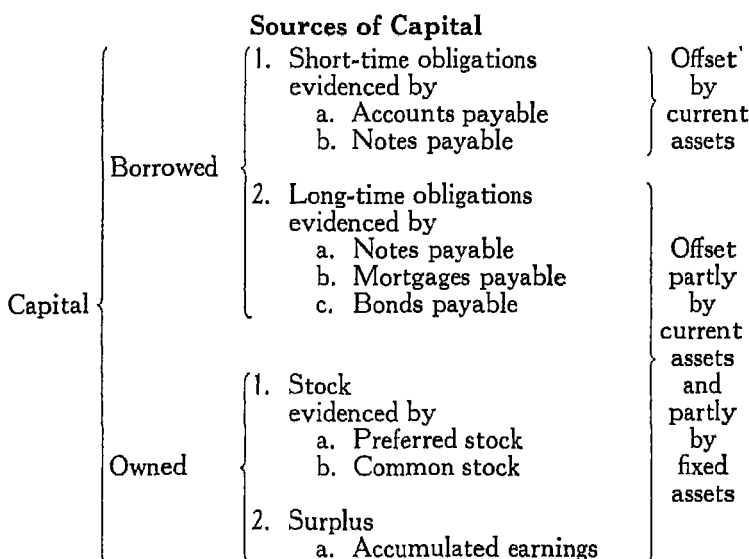
The long-term creditors of the business supply capital in three ways:

1. By purchasing bonds
2. By loaning on notes secured by mortgage
3. By purchasing long-term notes

The short-term creditors of the business supply funds in three ways:

1. By selling goods on account
2. By accepting notes in payment of merchandise or of amounts due on account
3. By purchasing the short-time notes of the business

The sources of capital as stated above may be represented in diagram form as follows:



56. Method of obtaining capital

It can be seen from the foregoing discussion that new capital may be obtained in three distinct ways.

In Section 54 we have stressed the necessity of determining the uses to which capital is to be put and the employment of this information as a guide in choosing the sources from which the capital is to be obtained. This does not mean that there is only one way to obtain capital for a particular use, because the choice in many instances becomes a matter of judgment on the part of the management. In reaching a decision as to the sources from which capital shall be obtained every care must be taken to consider *all* of the consequences involved in the particular type of financing. Chapters VII to XV cover in detail the factors to be considered in arriving at such a choice.

Chapter VII

Capital Provided by Proprietors

57. Capital obtained by selling proprietary interest

When a new business is organized the usual method of obtaining the initial working capital is to have it contributed by the person or persons directly responsible for the operation of the business concerned. The usual small business will be a sole proprietorship. It is both owned and operated by a single individual and the original capital is often provided by him out of money that he has saved or accumulated from other sources. In the case of a partnership, the situation is similar. The capital may be provided in any proportion decided upon in advance by the members subscribing to the partnership agreement. It may represent their combined savings as the capital of a single individual may not have been sufficient to operate the type of business involved. It may also be that the functioning of the business requires more than one executive head.

It is in the corporate form of organization that more involved financing is encountered. The corporation may be formed by a group of individuals who intend to operate the business and consequently retain at least a majority of its stock. In order to obtain additional working capital they will sell a minor interest to persons who have faith in the ability of the managers to run the business properly and are willing to participate as part owners with only a nominal voice in the actual operation

of the company. The above plan is particularly adapted to non-speculative corporations that are small or at most medium in size.

In the formation of very large corporations the raising of capital is often placed in the hands of individuals who perform this activity as their chief function. They may have no interest whatever in the management of the company once the stock has been marketed. This is particularly true of highly speculative companies that are started by persons who are referred to as promoters.

The common characteristic of all corporations is that the original capital is secured by the issue and disposal of stock and this takes place regardless of whether the persons instrumental in that sale retain control of the corporation or whether it passes entirely into the hands of others.

58. Classification of stocks

As the complexities of modern corporation financing have developed, there has arisen a variety of modifications of the original type of capital stock. Stocks are usually distinguished by some descriptive term. The certificates issued represent the conditions of ownership under which each individual holder has a claim upon the business. These certificates are known as shares of stock. They are documentary evidence stating the exact position of the owner. The various types of stock may be classified as follows:

1. According to their values
2. According to the conditions under which they are issued.
 1. e , whether the stock is full-paid or assessable
3. According to the price and limitations attached to the ownership of the stock

59. Stock values

There are certain terms that have grown into common usage among dealers and holders of stocks that may bring confusion to the mind of the student unless thoroughly understood. These pertain to the various types of "value" and are referred to as follows: par value; book value; market value; and real value.

Par value—The par value of a stock is the value stamped upon the face of the certificate and is utilized for purposes of describing dividend payments when the payment is made in the form of a percentage or as an indication of the limit provided under assessable stock. The entire capital stock is then equal to the par value of a share multiplied by the number of shares.¹ Par value will be referred to in greater detail in a later paragraph.

The student should avoid confusing the par value with the other values, since it does not indicate in any way the price which may be obtained for the stock nor the price at which it was originally sold. For example, many issues may carry certificates stating that the par value is \$100 per share but this is an arbitrary figure and in no way indicates that the value is to be placed above, below, or at this amount.

Book value—The book value of stock is the value which is indicated by the records or books of the corporation. The net worth of a business "includes all investments made by stockholders and earnings left in the business."² The book value of a share of stock may be determined by dividing the net worth of the corporation by the number of shares of outstanding stock. It now becomes apparent that there is no relationship whatever

¹Gerstenberg: *Financial Organization and Management*, page 127 et seq.

²Stevens: *Financial Organization and Administration*, page 600.

between the book value of stock and its par value. A simple illustration will make this plain.

Brown Corporation			
Balance Sheet, December 31, 19			
Assets	\$700,000.00	Liabilities	\$300,000.00
		Capital stock	200,000.00
		Surplus	200,000.00
	<u>\$700,000.00</u>		<u>\$700,000.00</u>

Market value—Stocks of most of the country's leading corporations are dealt in on regularly established exchanges in one or more of the leading cities. Where this regular market has been developed there also follows what is known as a market value which is the price at which the stock is currently traded. There are many small corporations which do not list their stocks on any exchange. The market value of such stock is established upon the completion of any individual transaction.

There is a direct relationship between the book value and the market value of stock. When former increases or decreases, it will be reflected in the market price.

Real value—The real value of stock tends to be the same as the book value. The book value may be either consciously or inadvertently understated or overstated and to that extent will not correspond to the real value of the stock. Also the book value is a computation as of a past date whereas the real value always represents the present condition.

No-par stock—The majority of stock issued today is without par value, and this represents a distinct ad-

vancement. It removes many of the misunderstandings of the arbitrary *par value*. This new practice in effect places the stockholder on his guard and notifies him that the stock certificate represents his proportionate share in the ownership of the corporation and nothing more. Nearly all states today have a law permitting the issue of stock on a no-par basis.

60. Conditions in stock issues

Stocks may be full-paid or assessable. In the former case it is assumed that the corporation has received payment equivalent to the par value whether it be in cash or in property. In this connection many states have restrictive laws which prevent the issuance of stock beyond a certain level in return for property which the company wishes to acquire. This is to furnish protection to the stockholders who pay cash, since in the promotional plans it has been possible for some individuals to dispose of undesirable property at the expense of the corporation. This is only partial protection and it is considered the obligation and responsibility of the individual stockholders to acquaint themselves with the facts. In one state the Supreme Court held that property could be accepted in lieu of cash because the corporation required property to operate, and that it did not matter whether the property itself was acquired or whether cash was obtained with which to purchase the property. In most states the deciding factor is one of good faith on the part of the officials of the corporation, and if it can be shown that property or services were accepted on this basis the transaction is legal.

It is usually stated on the face of the certificate that full-paid stock is "full-paid and non-assessable."

Unless other modifying statements are included, this means that the stockholder is free from any liability and that the only loss he might encounter if the corporation becomes insolvent is the money which he originally invested. The creditors of the corporation have no additional claim against him to provide funds for payment of the company's debts.

Assessable stock is par value stock which has been originally sold at a price under the value stated on the face of the certificate or stock which is being sold on an installment plan. If the corporation should become insolvent, in almost all states the stockholder is liable to the creditors for the difference between the purchase price and its par value or for the difference between the amount paid in on installment purchase and the stated value. For instance, if stock with a par value of \$100 sold at \$85, the purchaser of the stock is liable to the creditors to the extent of \$15 in case of insolvency.

Avoiding liability for discount on stock—In the past there have been many devices permitting purchasers to evade liability for discount on stock purchases, but in recent years the S. E. C. supervision over stock sales has made this type of manipulation extremely difficult if not impossible. It was sometimes possible to arrange to issue large quantities of stock for property, under an agreement that part of the stock would be donated back to the company. It was assumed that this stock had originally been issued for full value, and thus when it was sold again, regardless of its price, it placed the new purchaser under no liability for discount. This practice was carried on particularly in the case of highly speculative issues.

61. Rights and limitations of owners

Stocks may be classified according to the rights and limitations attached to their ownership as follows:

- | | | |
|----------------------------------|----------------------|---|
| 1. Common ¹ | | |
| | as to dividends | { Cumulative
or |
| | as to assets | { Noncumulative
with Railroads (not often)
with Industrials (generally) |
| 2 Preferred | as to voting power | { Exclusive (seldom)
Special (often) |
| | as to other features | { Callable
Convertible
Participating |
| 3. Stocks analogous to preferred | | { Interest bearing
Special
Guaranteed
Founders' |
| 4. Debenture | | |

62. Comparison of common and preferred stocks

The simplest type of financial organization in a corporation carries a single class of stock. With the complex developments in our financial operations it was found expedient by corporation management and promoters to introduce other types of stock which because of particular points of attraction made it salable in different markets and to different types of investors. Soon there arose what was known as preferred stock, which as the name implies was preferred in certain respects either as to distribution of earnings or to claims upon assets. In cases where the preferred stock was issued the ordinary stock became known as "common stock." The word

¹J. Adams, Jr. "Annals of the American Academy of Political and Social Science," XXXV, 325-344.

proved somewhat misleading since the preference usually referred only to specific conditions and there were always residual rights belonging to the common stock which in their aggregate could be more valuable than those resting with the preferred. One of the common instances of this sort is the fixed rate of return on many preferred stocks, with the remainder of the earnings belonging entirely to the common stockholders.

The advantage of the preferred stock is that it possesses the first claim on earnings and this payment must be made before any distribution may be made to the common stockholders. Sometimes there are conditions of preference concerning voting power which in turn is assumed to control the management of the company. Usually this voting power rests in the common stock, but very often the provision is made that if the preferred dividend is not paid over a stated period of time the right to vote is either transferred to the preferred stock or it participates on an equal basis with the common. In the case of dissolution of a corporation the preferred stock usually receives an amount equivalent to its par value before the common stock participates in the distribution of assets.

If the right to dividends on a basis of a certain percentage for each year is established definitely out of profits regardless of whether they are earned in the current year or in a future year, then the stock is said to be *cumulative*, but if the payments are restricted to the earnings within a given year regardless of whether they attain to the level stated on the face of the certificate, then the stock is said to be *non-cumulative*. The unpaid portion of a cumulative dividend does not represent a liability on the part of the corporation since these

dividends are not due until the profits have been made and the dividends declared. On the other hand, it does represent a distinct claim against the earnings of the company and affects materially the status of the common stock. Unless this item is shown clearly in the balance sheet of the corporation, it is impossible to judge the standing of the different classes of stockholders.

63. Special features in preferred stock

In the preceding paragraph it was pointed out that many special features have been added to preferred stocks. Some of these have made preferred stock almost as desirable as bonds wherein the matter of certainty of income is concerned. Examples of some of the more important provisions are as follows:

1. No bonded debt exists, nor can any be created without the consent of 75 per cent of the preferred stockholders. No stock having priority over, or a parity with, this issue exists nor can be created without the same consent.

2. A cumulative sinking fund of 5 per cent per annum of the greatest amount of preferred stock at any time outstanding is created for retiring the issue at no more than 110. This increases the equity in the property annually and assists in maintaining the market price.

3. Net total assets must be maintained at 250 per cent and net quick assets at 150 per cent of the preferred stock outstanding.

4. No dividends can be paid on the common stock until a reserve equal to two years' dividends and sinking-fund requirements on the preferred stock has been set up out of earnings subsequent to June 30, 19 , and none can be paid which will impair this reserve.

With these provisions in force the preferred stock owner is in a position, from the standpoint of security, almost equal to that of the bondholder. It remains true, however, that in case dividends are not paid, he has no power to take possession of the management of the corporation, as has a bondholder under the usual terms of a mortgage.¹

¹H. G. Moulton: *The Financial Organization of Society*, p. 153.

The student should not be confused by the idea that all of the foregoing provisions are contained in preferred stock issues or even that a majority of them are to be found. These examples are merely given as modifications which are often found and most preferred stock issues contain some of these or others which are similar.

64. Callable preferred stock

In cases where preferred stock is callable there is usually a price fixed which includes a premium over and above the par value. This provision is inserted in order that the financial structure of the corporation may be eventually simplified in case the earnings warrant the retirement of a preferred stock issue. The premium is added in order to compensate the preferred stockholders for parting with a security which has been built up in value.

Convertible preferred stock—The convertible feature in preferred stock is also utilized for a simplification of the financial structure and is included in the rights of the stock in order that a conversion to common stock may take place when the common stock has reached a value which is on an equal or better level than that of the preferred. This is considered a desirable feature as it means that the preferred stockholder has his added security during the early days of a corporation's life and still has the possibility of participating in greater profits if the corporation should eventually prosper.

Participating and non-participating preferred stock—In an earlier paragraph it was pointed out that preferred stock carries a preference over common stock in the receipt of dividends up to a certain amount. When this amount has been reached, it is possible for distribu-

tion to be made on the common stock. When equal payments have been made on both classes of stock, a question arises concerning the distribution of further profits. Often the preferred stock has no claim to further profits and certificates in this class are known as *non-participating*. There are other companies whose preferred stock shares equally with the common after each has received an amount equal to the stated preference for the preferred. In these cases the preferred stock is described as *participating*.

First and second preferred—With the increasing complexity of the financial structure of corporations, it was found necessary in many instances to introduce more than one issue of preferred stock. Where this necessity arose the relationship of the preferred stocks to each other and to the common stock had to be clearly stated. In order to make the various issues salable and appealing to different types of investors, certain advantages had to be offered in each. Consequently in all of the provisions there arose the question of seniority as to preference and one preferred stock always had to have a prior claim over the other as to the earnings or assets of the business. These stocks were described as first and second preferred with the *first preferred* entitled to a certain dividend or dividends before any payment is made to the second preferred. The *second preferred* in turn had certain preferences over the common stock.

There also arose instances where the common stock was divided into two or more classes, one class having a certain right or preference not enjoyed by the other. In such cases the different classes of common stock usually referred to voting rights or dividends whereas claims on the assets of the company were equal. Sometimes such

stock is referred to as Class A stock and Class B stock.

65. Stocks analogous to preferred stock

In the classification of stock certificates in paragraph 61, the third general group was designated as "stocks analogous to preferred." These stocks are analogous to preferred in that they are accorded certain specific rights or have placed upon them certain definite limitations. Illustrations were mentioned as follows: interest bearing stock; special stock; guaranteed stock; and founders' stock.

Interest bearing stock—There is really little difference between interest bearing stock and preferred stock. The former requires that interest instead of dividends shall be paid upon it before any distribution can be made upon the common stock.

Special stock—This type of stock is encountered only in connection with companies incorporated in the State of Massachusetts, and therefore does not play an important part in the financial activity of the country. Its chief characteristic is that it includes a semi-annual dividend which if not paid becomes a liability of the company. In this sense the stock is similar to a note or a bond, since the unpaid dividend is placed on the same basis as any other unpaid debt.

Guaranteed stock—With the development of holding companies and the intricacies of internal finance, it was sometimes found desirable for a parent company to guarantee dividends on the stock of one of its subsidiaries. In this way there came onto the market what has since become known as "guaranteed stock." Usually this relationship comes into being because the parent company requires the use of some property which the

second company holds and in return for its acquisition is willing to guarantee dividends in the consolidation or absorption. For example, a utility company might require the facilities of a neighboring company in order to fill out certain portions of its distribution system. In order to obtain the consent of the stockholders of the latter company to the consolidation the absorbing company is willing to guarantee a certain dividend rate.

66. Class A Common stock

During many years of American investment history, both investors and bankers frowned upon the practice of issuing more than one class of common stock. The practice had been well established for many years in England without any particularly bad results since the rights and privileges of each class of stockholders was always clearly set forth. About twenty years ago a move began in this country toward issuing special classes of common stock and it developed considerably in the intervening period. The stock that has been issued is usually called Class A and Class B stock with the Class B as the residual security.

When analyzed carefully Class A common stock appears to be only a sort of secondary, non-voting, participating preferred stock under a new name, offering less security but a greater chance of speculative profit than the usual type of preferred stock.

67. Unissued stock and treasury stock

The charter of a corporation states the amount of stock which the corporation is authorized to issue; but the amount authorized has no direct bearing upon the amount issued because it is not compulsory that all of the stock shall be distributed. It is quite a common practice for a company to issue only a part of its author-

ized stock at the time of its organization, reserving the remainder for the purpose of raising additional capital when expanded business shall make this necessary. When a company is organized plans are usually laid whereby a sizeable amount of stock can be held in reserve for just this purpose. A failure to do so often results in encountering considerable difficulty in obtaining authority for an additional issue. This situation may be distinguished by an examination of the records of a company and looking at the three headings under which the activity takes place. These are: first, authorized capital stock, which is the total stock of the corporation; second, issued stock, which is the amount that has been sold; third, unissued stock which is the amount remaining with the company.

Treasury stock is stock which has been issued and is later donated to the company or purchased by it and held at least temporarily. It is necessary to distinguish this treasury stock from the unissued stock referred to above. Treasury stock has been issued for value received and then has come again into the hands of the corporation where for bookkeeping purposes it is listed as an asset. Unissued stock, on the other hand, has never left the hands of the corporation and represents no acquired value. These two items are frequently combined on corporation balance sheets but they should always be shown separately and clearly distinguished.

68. Stockholders' rights

Stockholders' rights are sometimes issued to owners of record in order to compensate them for the decrease in equity in the old shares caused by the issue of the new ones. These rights imply a privilege on the part of the

holder to purchase additional stock at a price presumably below that at which it can be acquired on the open market. These rights are sometimes confused with stock dividends; but there is a difference which lies in the fact that the stock dividend is issued without obligation on the part of the recipient whereas the holder of rights must exercise the privilege contained therein in order to receive any benefit. For example, rights may be given a stockholder which permit him to buy a share of stock selling on the market for \$160 for as little as \$100. He may receive the right to purchase one share of additional stock for each share previously held or for each five or for each ten or any number that serves the purpose which the directors of the corporation have in mind. But the important thing to keep in mind is that a purchase must occur and unless the stockholder is in a position to exercise his privilege of buying or can sell his rights, and does actually consummate the transaction, the advantage that would accrue to him under the rights is lost.

When stock rights are issued on a fractional basis, there is usually trading on the open market in these fractions and in this way the recipient of rights can either sell or acquire from someone else the fraction necessary to fill out the privilege of purchase for a full share. Usually there is a time limitation placed upon these rights and unless they are exercised within the indicated limit they become void. In the example used above the market value of five shares at \$160 is \$800. After purchase of the new share at \$100 the average price of shares becomes \$150. The value of each right attaching to each old share owned becomes therefore \$10, found by subtracting from \$160 the new average price of \$150.

Since rights are bought and sold just like shares of stock, a formula to make easy the computation of their value is worked out from the calculation given on the preceding page as follows:

$$\frac{\text{Market Price} - \text{Cost Price}}{\text{Shares Required} + \text{New Share}} = \text{Value of Rights}$$

Substitution amounts given, the formula becomes:

$$\frac{\$160 - \$100}{5 + 1} = \$10$$

To obtain a share of stock under this method the purchaser would buy five rights at \$10 each which with the \$100 addition would equal the new average price of \$150.

Chapter VIII

Surplus as a Source of Capital

69. Capital provided by proprietors

In Chapter VI it was explained that the commonest method of providing the original funds for a business enterprise was through acquiring a proprietary interest. This means that the man who starts the business and intends to run it in most cases supplies the necessary capital or supplies a part and obtains the remainder by transferring interest in the enterprise to some other individual or individuals. There is no fixed rule as to the proportion of capital thus supplied and it will vary between types of businesses and between firms in the same line of business. The two controlling factors are first, the judgment of the proprietor and secondly, the availability of capital for the particular purpose. There are two reasons for the proprietors supplying a majority of the capital: the first lies in the possibility of later financial difficulty which cannot always be foreseen and wherein control of the business might easily be lost if it has been too heavily dependent upon loans; the second comes from the attitude of the banks toward the risk involved.

Up to now we have dealt only with capital provided for the original investment in a business; but in most successful businesses there is another source of capital provided by the proprietors and this consists of profits which are permitted to remain in the business in order to take care of the needs of expansion. The proprietary interest is represented by the net worth of the business

which is composed of two items: the capital, which has been explained previously, and the surplus. In this and the succeeding chapter the method will be explained whereby the surplus will serve the same purpose as capital.

70. Definition of surplus

Two things must be kept in mind in attempting to explain the nature of surplus: the point of view of the reader, and the consequences of a decision to take advantage of this source of capital.

It is assumed that the student is primarily interested in the attitude of the manager of a corporation, who is the representative of the proprietary interests in the business. The following discussion will develop an understanding of surplus as an instrument or device for increasing the financial effectiveness of the corporation. In developing this viewpoint it will be necessary also to keep in mind the purpose for which surplus is created. If this is not done, there may arise points in the progress of the business where faulty decisions will result from an erroneous conception.

The term surplus has led to considerable confusion in describing the condition of a corporation because there is a great diversity of opinion among accountants, financiers, and business men as to the meaning that the word carries. It is used in different senses by both writers and practitioners, and the student must be careful that he is not confused when making comparisons. Professor Kester says that "under the corporation form of organization, surplus in its broadest sense represents the difference between the net worth of business and the capital stock outstanding."

To illustrate:

Capital Stock			
Current assets	\$7,500.00	Current liabilities	\$3,000.00
Fixed assets	10,000.00	Fixed liabilities	3,000.00
		Capital stock	8,000.00
		Surplus	3,500.00
	<u>\$17,500.00</u>		<u>\$17,500.00</u>

In the above statement surplus would be represented by \$3,500 or the difference between the total proprietorship, \$11,500 and the \$8,000. Although Professor Kester suggests that in its broadest sense surplus may be defined as on the preceding page he explains that the tendency of the leaders in accountancy is "to restrict surplus to that portion of the margin available for dividends." By "margin" he means the difference between net worth and the capital stock. Mr. Montgomery supports the latter view for he says, "the surplus of a corporation should represent an actual surplus, this is, a balance of net profits after all reserves have been provided, including the reserves created out of surplus such as working capital, etc., leaving an amount safely distributable as dividends."

Financier's idea of surplus—A stockholder is interested in surplus primarily as a source of dividends. Because of this fact and because stockholders are in the habit of looking to the surplus item on the balance sheet in an effort to determine just what dividends they must expect, it has been thought wise by some accountants in

preparing reports which are to go to stockholders to modify the definition. The stockholder often has a limited knowledge of accounting and is inclined to think of surplus only as a balance of accumulated profits available for dividends. While this modification of the term may be considered expedient, it is too narrow a viewpoint for the use of the financial manager of the corporation. When the financial officers of a business consider the surplus item, they are interested in it as a source of capital and the dividend action to them is considered in this sense only as it reduces the surplus and thereby reduces the capital of the business.

There are some items which are referred frequently to as capital surplus in order to indicate that they are not available for dividends. These items are offset by assets and are a part of the net worth of the business inasmuch as they constitute a source of capital. This surplus arises out of premiums on capital stock, excess of net worth of a purchased corporation over the stock given in exchange, etc., and consequently are not considered by accountants as available for dividends.

In view of the foregoing explanation we shall speak of surplus first as a source of capital, and in this sense we are using the term broadly to include both appropriated and unappropriated profits. When we discuss the distribution of net earnings, we will use "surplus" in the narrow sense to refer to unappropriated profits only. The future discussions will clarify the usage so as not to confuse the reader.

71. Source of surplus

A study of financial records of corporations will show that there are several ways in which the surplus of

a corporation may be increased. The most important of these are as follows:

1. Inheritance from previously absorbed corporation
2. Revaluation of assets
3. Sale of stock above par
4. Sale of assets above book value
5. Accumulation of earnings

72. Inheritance from previously absorbed corporation

In the acquisition of one corporation by another where the payment is made in stock, there is usually a difference between the net worth of the business purchased and the stock issued in payment. Very often the stock issued is greater than the corporation's net worth and in order to adjust this situation it is necessary to create a good will item in the records and accounts. However, in some instances we find the opposite true and the net worth of the business purchased will be greater than the stock issued in payment. In the latter instance it is proper to credit the difference to surplus. There is an obligation here on the part of the officers of the corporation to ascertain that the assets of the newly acquired corporation have been conservatively valued and that there are no outstanding liabilities that have been overlooked or omitted. From the very nature of this source of surplus it becomes apparent that it is more desirable to carry it in a special surplus account where it can be regarded as part of the capital investment and not available for dividends. Since it has not arisen as a result of the operations of the corporation, it should not be confused with earnings from which present dividends can be paid. If this special surplus were immediately divided among the stockholders, it would

bring a decrease in the working capital of the business which might be harmful to its progress.

73. Revaluation of assets

The revaluation of assets in order to increase their book value is a very dangerous practice both for the directors who are intrusted with the determination of a corporation's policy, as well as from the point of view of the business as such. Not only is it very injudicious to credit the estimated increase in value to surplus and make it available for dividends, but in at least one case the courts have held that the directors who indulged in such a practice were individually liable to the creditors of the business for the amount dispersed when the corporation later became financially embarrassed. If there is a revaluation of assets, any increase should be carried in a special surplus account and thus it becomes merely a bookkeeping operation and does not increase the capital or in any other way affect the actual financial status of the business.

74. Sale of stock above par

When stock is sold above par, the premiums received have created an item about which there has been considerable debate. Obviously these funds are not accumulated as a result of the earnings and operations of the corporation and therefore it is questionable to use them for dividends. Instead of crediting the general surplus account, it is considered better management to treat such premiums as capital contributions and to hold them in a special surplus account which will show by its nature that it is not available for dividends. Regardless of how they are shown in the accounting records such

premiums are received in the form of assets and represent an addition to the capital so long as they are left in the business. The most desirable method is one that has been employed by many national banks which have sold their initial stock at a premium and showed these premiums in the permanent surplus account of the bank.

75. Sale of assets above book value

The sale of fixed assets at a price above book value, like the sale of stock above par value, represents an addition to the sum total of profits. Here again it is desirable that a special record be maintained under an account indicating the nature of these items in order that a false impression may be avoided. The primary consideration here, as in the foregoing instance, is to distinguish the profits secured from the regular operation of the business from those obtained in other ways. This will mark these outside additions to net worth and at the same time will set them apart as a reserve against losses on other capital items.

76. Accumulation of earnings

We have dealt first with the unusual or outside conditions under which surplus may be acquired. Now we come to the primary source which is the accumulation of earnings. The significance of this surplus arises from several reasons:

1. It represents a fund free from reservations regarding its usage.
2. Its origin lies in the normal activities of the business.
3. It serves as an unquestionable source of dividends for the corporation.

This source of surplus is the one with which we assume the student is more immediately concerned, as the

purpose of this book is to prepare him for the financial problems which arise from day to day in the management of a corporation. He will be most interested in the profits which come from the regular transactions of a commercial or industrial enterprise. Also, if he should become a manager, he will have an obligation to the proprietors of the corporation who are interested both in the expansion of their business and in some regular return from their investment. Since the accumulation of earnings as a source of surplus is of primary importance to both the manager and the proprietors, we will consider in some detail its relationship to other sources of capital.

77. Income statement

The general condition of a business may be obtained by a study of its balance sheet, but to those concerned with its immediate financial prosperity its profit and loss statement is the real indicator of the advancement or decline during any financial period. The only means that an investor has of determining how the net worth appearing on the balance sheet has been arrived at is by studying the profit and loss statement. This is a composite of all the reports and statements through which the management has controlled the business and is a test of the efficiency of the various departments. Its importance as an indicator cannot be overemphasized.

In a simple or condensed form an operating statement should present clearly certain principal items. These are as follows: (1) Sales; (2) Sales deductions; (3) Cost of goods sold; (4) Operating expenses; (5) Non-operating income; and (6) Non-operating expenses. In the succeeding paragraphs we shall deal with each of these items in order to determine what they represent.

78. Sales

Any company that is operating for the purpose of making a profit will be engaged in selling either its goods or its services. Returns from such transactions will constitute the first item on the income statement. It is from the sales income that all expenditures of the business must be met and the net profit or earnings determined. Consequently only bona fide sales as a result of which either payment has been received or a legally enforceable claim obtained should be recorded in this account and every effort should be exerted to avoid an over-statement. Care should be taken not to include as sales those transactions where title to the goods has not passed, such as goods sent on consignment, goods shipped to agents, and orders received but not yet filled.

79. Deductions from sales

The total of the deductions from sales must be subtracted from gross sales to arrive at the net income of the business. These deductions include goods returned by customers because they were found unsuitable for use and customers' claims for deductions from invoiced price because of defects or damage received in transit. It is desirable that these deductions which are carried as "returned sales" should be indicated separately in the income statement so that an analysis of their cause can be more readily made.

80. Cost of goods sold

In order to determine the cost of goods sold during any period of time there are three principal items which must be considered: (1) Inventory at the beginning of the period; (2) Purchases during the period; and (3) In-

ventory at the end of the period. Business men are inclined to be optimistic and hence there is a tendency to over-estimate the value of merchandise. This creeps in as one of the principal sources of error in determining the cost of goods sold and it raises the value of the inventory at the beginning or end of a period.

It has been considered good practice in the past to record the merchandise inventory at whichever is lower, cost or market value. No profit should be assumed because of goods on hand which were purchased at a price lower than that which now prevails in the market. So long as the inventory is not sold no profit has been realized. It cannot be emphasized too strongly that the accounting records and reports should not show profits until they have actually occurred as the result of sales.

Confusion may arise in the preparation of sales budgets which are estimates of future results. Great care should be exercised that these estimates are used only for planning and are never reflected in accounting records and reports. This is particularly true in the case of the valuation of merchandise inventories. Purchases like sales should be shown at the net amount with returns and allowances deducted from the gross purchases. All expenses incurred in the securing of goods, such as freight and drayage, should be added to the invoice price to obtain the total cost of goods purchased.

81. Operating expenses

In order to determine the gross profit on sales, we subtract the cost of goods sold from net sales. The next step is to find the net operating profit which is in this case, the net profit on sales. This is done by deducting from the gross profit the amount of expenses incurred

in the operation. In order that the net income should be stated accurately, great care must be exercised in determining the expenses of the business. This is another item that is frequently understated, because many of the expenses are of an intangible nature and are easily overlooked or disregarded.

Those expenditures which are made in cash are easily recorded in full when they take place, but it is in those expenditures where payment is made later and the immediate outlay of cash is not necessary that an omission from the accounting reports is likely to occur. If an amount of capital is invested in fixed assets and these in turn are outmoded or worn out in the operations of the business, these costs constitute an expense of conducting the business and should be included.

Many businesses have failed to make adequate provision for these depreciation costs and consequently have been led into difficult situations. An aid of an indirect sort has come about with the imposition of certain taxes under the Federal Revenue laws. These laws have tended to induce business firms to charge off a fair amount of depreciation because the immediate and direct result is to lower the amount of tax liability. It cannot be emphasized too strongly the desirability from the point of view of financial management of proper provision for depreciation charges.

Accrued expenses—By accrued expenses is meant those expenses wherein the service represented has been received by the business but payment is not yet due. This should be reflected in the accounting records and reports as soon as the accrual has taken place and unless this practice is carefully followed, the statement of earnings of the business will be inaccurate and distorted.

Capital vs. revenue charges—In a previous paragraph we have dealt with the dangers connected with an overstatement of operating expenses. It is equally important that these operating expenses should not be understated. Much of the difficulty in this connection arises from expenditures in which it is difficult to determine whether they should be treated as capital charges or revenue charges. There has been a tendency to charge expenses to asset accounts when they should have been charged to expense accounts. The result in a move of this kind would be to overstate the earnings of a business. An outside check has also been furnished on this activity by the Federal Income and Excess Profits Taxes, but unfortunately this has forced the tendency to the other extreme and now companies are inclined to make all possible charges to operating expenses in order to reduce the net income and thus decrease the tax to be paid to the Federal Government.

Practices of this type are not only unsound financial management, but must be condemned from the viewpoint of good accounting. In the preparation of budgets, which are based on past results, the plans for future operations will be false and inaccurate in proportion to the inaccuracy of the stated results of past experience. A certain amount of judgment is always necessary in the determination of these expense charges, but this very fact only serves to emphasize the necessity of particular care at this point of the business.

In the past it was often felt to be desirable to build up a secret reserve through an understatement of profits. This was done by overstating expenses. Accounting records must be kept orderly and accurately to show the management just what has taken place as a result of past

operation. To underestimate or overestimate certain items in order to take care of unusual conditions is not consistent with the policy of using accounting records as a basis of sound business management and business control.

Classifying expenses—In order to secure statistics which will serve as a basis for financial control, much judgment must be exercised. In this connection many problems arise in the recording and classifying of operating expenses. Classification should be carried out in a way that will make the determination of financial requirements as easy as possible. It should be built on a basis of the principal activities of the business so that when it is desired to increase or decrease any of these it will be possible to judge the effect on the expenses incurred. This will aid in estimating the future expenses of the business as well as the future capital requirements.

82. Non-operating income

There are in most lines of business certain items of income which are not the result of regular operations. These include interest received on bank deposits or bonds, dividends on stock, profits from the sale of property or goods other than those the business regularly deals in, and similar items. These should be indicated separately in the income statement under "non-operating income." If they are not handled separately, it becomes impossible to judge the future possibilities and financial capacity of the business.

83. Non-operating expenses

In the same way there may be certain items of expense which are not incurred because of regular operations. These should also be shown separately as "non-

operating expenses." Examples include interest paid on notes and bonds and other expenses incidental to the buying and selling of property other than that in which the business deals.

Finally, in order to determine the net income of the business, we first determine the gross income by adding non-operating income to the net profit and then subtracting the non-operating expenses.

Chapter IX

Surplus as a Source of Capital—*Continued*

84. Disposition of net income

There are items contained in a statement of operating and non-operating expenses about which disputes arise because of varying definitions employed by accountants. Property taxes, interest, and rents have been treated as expenses of the business, and this is where they rightly belong. It is misleading to obtain what is purported to be "net income" and then have a long list of items which must be further deducted. The term "net income," as used in this book and in others in this series, will mean the income which remains after *all* deductions for expenditures incidental to the operation of the business have been made.

After we have arrived at a net income based upon the definition given above, our next purpose is to decide the use to which this money is to be put. There are four uses and these are: (1) Income tax; (2) Reserves; (3) Dividends; and (4) Surplus.

85. Income tax

There has been much misunderstanding and dispute over the definition of income, for tax purposes. At present taxes are levied upon the annual net income regardless of profits or losses in preceding or succeeding years. Since most businesses run their bookkeeping on an annual basis, this seems to be a convenient and reasonable method to employ. When the income tax first came into

use in this country it was levied only by the Federal Government, but in recent years many states have incorporated income taxes in their fiscal plans. The state taxes vary considerably as to the definition of a tax base, the method of levy, and collection, and the scale of tax rates.¹

86. Reserves

After income taxes have been paid there arises a question of business policy wherein the management must decide whether to set aside funds to take care of specific or particular purposes. There is constant pressure on the part of the stockholders to have the officers of a corporation pay the largest possible dividends, but a proper division must be made between the present satisfaction of the stockholders' desire and the retention of funds in the business which will bring a greater return in the future. This involves the question of "reserves."

It has been explained earlier that there are certain terms in accountancy which are used rather loosely and not according to a strict definition. This is true in the use of the term "reserves" of which there are two distinct types: (1) valuation reserves, and (2) proprietorship reserves.

Valuation Reserve—Certain assets that are carried in the capital account of a business will depreciate or decrease in value either because they become obsolete or are exhausted. In order to take care of this decrease in value, an amount equal to the estimated loss is set up in the valuation reserve. In the accounting records the reserve is created by crediting a capital account with the

¹For a complete outline of State and Federal taxes see *Tax Systems of the World*, published by the Commerce Clearing House, Chicago, Illinois

reserve and debiting some expense account. Such reserves are deducted as expenses and are not a distribution of profits. Typical are the reserves for depreciation and reserves for bad debts.

Proprietorship reserve—A proprietorship reserve is created when a portion of the profits are set aside for a period of time as a special account and “ear-marked” to indicate that the funds are not available for dividends. When the purpose for which the reserve was created has been accomplished, the funds are transferred back into the general surplus account. This fund is known as a proprietorship reserve because the funds are merely appropriated surplus and represent a part of the proprietorship. The accounting records follow this transaction by crediting the account which indicates the nature of the reserve and debiting the profit and loss account after the net income has been determined. This is really a distribution of net profit. Illustrations of proprietorship reserves are sinking funds or reserves for additions and extensions.

87. Dividends

After deductions have been made from the net income to take care of income taxes and reserve accounts, the remainder is available either for distribution to the stockholders in the form of dividends or for additions to the surplus account. There are many factors which will govern the disposal of these funds and one of the most important is the nature of the stock which the company has outstanding. Certain preferred stocks are cumulative, which means that any failure on the part of the company to make full payment out of current earnings creates an additional obligation which must be met in the future. Even if there were preferred stock outstanding which was

not cumulative, it is generally acknowledged on the part of most directors that the specified amount under this type of security should be paid before profits are carried to the surplus account.

It is more difficult to decide on a distribution policy where holders of common stock are concerned. The more obvious factors to be considered include the amount of earnings, the amount of accumulated surplus, and the requirements for addition to capital. Consideration also must be given to the nature of the business, the previous dividend policy of the corporation, the current market price of the stock, the age of the business, its current financial condition, the general condition of the industry, and general business conditions.

If the nature of a business brings it stability and stable earnings, the directors will be inclined to pay out a major portion of the funds available in any year to the stockholders in the form of dividends. With a speculative business much greater care must be given to the dividend policy in order to allow for expected fluctuations in earnings. All of this will be determined by the type of product or service in which the company deals and the regularity of demand as indicated by the market which it serves.

88. Regularity of dividends

One of the most desirable conditions under which an investor can hold the securities of a corporation is one of confidence that dividends will be paid with regularity. However the stockholders are, in the last analysis, the owners and proprietors of the business; and given instances arise wherein it is to their interest to consider first the financial needs of the corporation as such and to

forego an immediate return in favor of broader future benefits to the company. The situation is made more complex by the fact that many shareholders hold their stock for a limited period of time and are interested primarily in the income which they expect at once rather than the far distant future earnings. This is particularly the case in large corporations whose stocks are traded in on the open exchanges of the country.

If the company is experiencing what might be considered a normal degree of development and profit, the benefits of declaring dividends regularly are:

1. It maintains the investor's morale
2. It tends to increase the value of the stock of the corporation

Every corporation is interested in creating a sound reputation and one of the best methods by which this may be achieved is to satisfy the stockholders who have invested their funds by giving them a regular return on their investment. There is a connection between the first and second advantages referred to above because this satisfaction on the part of the stockholders coming from the regular income which the stock yields will cause them to value their stock at a higher level. This will work as a reflection of the satisfaction and approval with which the company's policies are regarded.

89. Kinds of dividends

There are five types of dividends commonly used by corporations in the distribution of income to stockholders. These are as follows: (1) Cash; (2) Stock; (3) Scrip; (4) Property; and (5) Liquidating dividends.

Cash dividends—Except in unusual cases and in order to accomplish some definite purpose, it is customary

for corporations to distribute their earnings in the form of dividends paid to stockholders in cash. In order to make payments of this type with regularity, it becomes a matter of good management to see that the amount of money necessary for distribution is ready in the form of cash at the time of distribution. This means that although the earnings of a corporation may be sufficient to meet the dividend needs difficulties will arise unless the necessary amount of earnings has been converted to or retained in the cash account. Generally speaking this is the most desirable form of payment from the viewpoint of the management because it fulfills the obligation to the stockholders in a clear and definite way.

Stock dividends—During the last twenty years there has been a decided tendency on the part of corporations to issue stock dividends. This means that instead of giving the stockholders a cash payment in proportion to shares that they own, a distribution of additional stock is made on the same basis. The reasons behind the issuance of stock dividends are largely psychological, and they are used to affect the attitude toward the corporation of either the present owners of stock, possible future owners, or the public at large.

In the first instance, the payment of a stock dividend makes the stockholder conscious of the fact that the business in which he owns an interest is progressing and developing, and he looks upon the additional stock as concrete evidence of this phenomenon. The effect upon the general market is that a larger number of shares brings a correspondingly lower price and thus permits a greater distribution of stock among the buying public. Companies interested in selling a consumer merchandise to large numbers of people feel that this is particularly

valuable and that every stockholder is a better prospect for the purchase of the company's product than he was before he acquired an interest in the company. There is a tendency from time to time to attack a corporation as such and this is accentuated particularly in those cases in which the represented earnings per share are very large. By paying dividends in stock the corporation may subsequently pay cash dividends in which the stockholders receive the same total, but in which the amount earned and paid per share is reduced.

But it must be kept in mind that no amount of stock dividends changes the real position of the stockholders.

Scrip dividends—Scrip dividends are used by corporations that wish to keep a regular dividend record but find themselves in a position of having insufficient cash. This may be the result of poor planning on the part of the management, or it may arise from some outside factor which the directors think will be adjusted in the future. In such instances, assuming that the corporation has a good showing of profits, scrip is issued which amounts to a promise to pay cash at some time in the future.

Property dividends—It is only in exceptional cases that a corporation will issue property dividends. This type of payment has usually occurred when a company owned stock or bonds in another company and wished to dispose of this holding to its stockholders. The holding company might wish to avoid depressing the market for the stock which it owned by offering it openly, and this would probably occur if the amount held represented a large portion of the total issue of the security involved. It is often simpler to round out the holdings to a point where an even distribution can be made than to turn them into cash.

Liquidating dividends—A liquidating dividend in the strictest sense should not be referred to as a dividend at all, but rather as a repayment of capital. Distributions of this type have sometimes been made on the part of industries concerned with the exploitation of natural resources. For example, a lumber company might own large timber acreage that is being depleted as the operation proceeds. If the earnings were paid entirely in the form of cash dividends, the time would arrive when the most important assets of the company would be completely exhausted and the stock would have very little value. In order to clarify this situation and also to relieve the stockholders of certain income tax burdens, payments of this type have been made. The procedure is to reduce the value of the capital stock item by an amount equal to the dividend payment. For example, if we assume that the par value of the stock concerned is \$100 and the company is able to pay \$10 per share on the foregoing basis, then the par value is reduced to \$90.

90. Relation of dividends to financial requirements

If cash dividends are to be paid, the company must be in a position to make this distribution without creating a shortage of funds for the ordinary operating requirements. A problem is often created in this connection through failure to recognize the fact that a book surplus does not necessarily indicate that the company is in a position to make cash distributions. When such a situation arises, it is usually better to sacrifice the record of payments in favor of a more conservative attitude—which would mean the postponement of dividends to a later date.

If upon examination of its position the officers feel

that the cash may be realized in a short period of time, they might be justified in paying a scrip dividend or in borrowing in order to pay a cash dividend. It is never sound to issue long-term obligations to meet such a situation. Generally speaking, the policy should be one of great caution in assuming any type of additional obligation in order to make dividend payments.

91. Accumulation of Surplus

It is only when a business has reached a point where its earnings are accumulating at a comparatively regular rate that it can afford to expand. In order to realize clearly when this situation exists, it is necessary to install a complete and informative system of accounting that will permit those entrusted with the operation of the company to establish the proper relationship between earnings and needs for expansion. This situation is closely related to the payment of dividends; and it was pointed out earlier that even in the most prosperous years dividends should be kept at a minimum in order to take care of those years when the earnings are not so large.

If a stabilized dividend rate results from a business having a regular income without the necessary careful planning which more erratic industries require, the surplus may be slow in accumulating. On the other hand, the amount accumulated as surplus will probably be quite large in businesses which experience great fluctuations in earnings. This results in two different situations regarding the obtaining of additional capital. The company with the regular income can probably secure capital at a fairly reasonable rate, while the speculative company will find its credit situation requires a higher rate of

interest payment but that the latter is partially counteracted by the accumulated surplus built up from its earnings.

When surplus is not needed—One of the first items that the observer looks for in examining the records of a company is the possibility of developing surplus as a source of capital. The desirability of this source is generally recognized but there are certain exceptions. These arise in cases where additional capital cannot be used advantageously because the company has reached a point in its development where further profitable expansion does not seem likely. The directors who are faced with this situation might decide to pay these funds out in the form of cash dividends or to invest the excess amounts in short-term securities which can be converted readily into cash if necessary. The cash of the lumber company referred to above makes an excellent illustration. It is possible that in its operations the company does not find that it can purchase additional timber lands within an area that promises profitable expansion and consequently the accumulation of a large surplus would be wasteful.

This is typical of an exceptional case, but as a rule it has been characteristic of American businesses to use surplus earnings for further development of the business. This method sometimes is slow and there is always the alternative of obtaining funds for expansion by selling new issues of stock and bonds to the public. The latter method might be particularly desirable in cases where unusual opportunities are presented and immediate funds are necessary to take advantage of them. An example of this would be the manufacture of types of merchandise which are dependent upon the popular fancy. Recognizing that the demand is of limited duration, the expansion

will have to be rapid enough in order to take advantage of the immediate market.

In the early days of American industrial economy most of the large and prosperous businesses were built on the conservative method of relying on the company's own resources to produce a surplus that would permit further development. This provides a certain stability of financial condition in the business and decreases the possibilities of embarrassment in periods of financial difficulty. It also reserves to the original proprietors the benefits to be derived from greater earnings in times of prosperity. The effect on the business is to provide a reliable source of capital and to insure a conservative use of the funds. In more recent years business operations have been conducted at an accelerated rate and this alteration in general policy has brought an increased tendency to resort to outside sources for the procurement of funds for business expansion.

Chapter X

Capital Secured by Means of Bonds

92. Owned versus borrowed capital

The capital required in the operation of a business as described in Chapter VI may be provided in three ways: by proprietors of the business; by issuing long-term obligations; or by means of short-time obligations.

The operations of a modern corporation usually require capital for a variety of purposes. Consequently the needs of the corporation should be studied in order that the method of raising funds shall in each case make it most convenient for the corporation to meet its obligation under the type of loan secured. A distinction is made here between "owned" capital, which is that furnished by the owners or proprietors of the business and the "borrowed" capital, which the business obtains from individuals who are willing to lend for a short or long term at various rates of interest.

There are as many variations in the ratio of owned to borrowed capital as there are businesses in existence, and it is impossible to give any fixed rules for this situation. A simple business that is conducted on a small scale by an individual proprietor or partners will usually have the greater part of its capital provided by the owners. It is most unusual for businesses of this type to borrow money through long-term obligations, and the short-term obligations, such as bank loans, are usually kept at a minimum. As businesses expand in size the tendency is to obtain more and more funds from the capi-

tal market through the issuance of bonds or notes. The present and following chapter will explain the methods of obtaining borrowed capital.

93. Sources of borrowed capital

There are two chief ways in which borrowed capital may be obtained: (1) by contracting fixed liabilities, and (2) by contracting current liabilities. The fixed liabilities of a corporation may be classified as follows:

1. Mortgages payable
2. Bonds payable
3. Long-time notes payable

94. Mortgages payable

The simplest form of long-term borrowing is the ordinary mortgage. A mortgage transfers the title to certain property from the mortgagor to the mortgagee with the provision that the title will be reinvested in the mortgagor if the note which accompanies the mortgage is paid at the specified time.

Under the terms of a mortgage the title to the property involved is in effect transferred to the mortgagee, but in actual practice the transfer of title does not take place but merely involves the pledge of the property as security for the debt covered by the accompanying note. If the note is not paid at maturity, the mortgagee must first make every reasonable attempt to collect his note, and then by process of law obtain possession of the property under a practice known as foreclosure. This is done through an accepted procedure wherein on a stipulated day the pledged property is advertised for sale at public auction to the highest bidder. If the amount obtained from the sale is more than enough to satisfy the note, the remainder is given to the mortgagor.

The commonest type of mortgage that is encountered in everyday business is the real estate mortgage and this is usually used to obtain only small amounts of money. The most popular method of acquiring real estate by individuals, sole proprietors, and partnerships, is through funds secured by this type of mortgage. Its use is sometimes expanded to cover the needs of a small corporation when only a limited amount of funds is to be raised. This limitation to small amounts comes about through the fact that it is unlikely that an individual or institution can be found who would want to lend a large amount of money to a single firm or person on a highly specialized piece of collateral. Even in the case of banking institutions where large amounts of money might be available it would be considered better banking practice to distribute the risk through smaller loans made to several firms.

95. Mortgage deed of trust

In order to overcome the difficulty described in the preceding section there has been developed what is known as a mortgage deed of trust wherein the mortgage is made in favor of a trustee who holds it for the benefit of several creditors. The purpose of this type of activity arises from the necessity to devise some means of obtaining funds from a large number of creditors and give to each equal security. It would be impossible to issue a series of separate notes and mortgages to cover each loan, since the mortgages would not be of equal rank under this method and the first one issued would have priority over its successors, etc. After the arrangement has been made for the creation of the mortgage deed of trust this is used as security for the issue of notes or bonds.

If the corporation borrowing the money finds that

it cannot pay either the interest or the principal upon the bonds as they come due, then the trustee will act as an individual but on behalf of the group of vote- or bondholders, and will exercise its right of foreclosure in the same manner that the individual would employ under a real estate mortgage as described in the preceding section.

96. Closed and open mortgages

"A closed mortgage limits the indebtedness to a specified total amount; accordingly additional bonds can be issued only under a second or junior mortgage."¹

Under the open mortgage on the other hand bonds may be issued to any amount. This does not mean that there is no protection to cover this situation in the open mortgage because there are usually definite restrictions which protect the investor. For example, it may be stated that the money acquired shall be used or invested in a specific way that will bring particular benefits to the company. When such restrictions are included it becomes known as a "limited" open mortgage. The company may find itself in a difficult position due to the restrictions of a closed mortgage when the time arises for it to issue additional bonds to provide the funds necessary for expansion and growth. The only recourse which the company has if the closed fixed mortgage has been exhausted is to issue bonds through a subsidiary with a guarantee by the parent company or to offer what is known as a collateral trust issue. This latter may be done if the fixed mortgage of the parent company does not include the "after acquired" clause. The other remaining method is the issuing of a second mortgage, but as this is of necessity junior in all respects to the first mortgage and represents to the

¹Stephens "Financial Organization and Administration," page 44

investors a claim which can be satisfied only after all claims by the first mortgage bondholders are satisfied, it will be difficult to sell these securities at a favorable price or at a rate of interest which seems fair to the company. One of the favorite methods where the mortgage does not include "all property to be hereafter acquired" is to execute a general (refunding) first mortgage which becomes a first mortgage on all the property of the company as soon as the underlying bonds mature or are retired either out of funds obtained through the sale of the refunding issue or by exchanging the maturing bonds for those brought out under the new issue. The general effect and impression of this type of operation is the same as that of a first mortgage bond.¹

At the other extreme we find the possibilities of abuse under the open mortgage. The bondholder has no assurance that the officers and directors of the corporation will not interfere with the security of his bond through a subsequent excess issue under the mortgage. Each additional bond sold under this plan weakens the position of all of its predecessors and lowers the security. Most mortgages in recent years have been executed either as closed mortgages or as open mortgages under certain specific limitations.

97. Procedure in issuing bonds

The various steps to be taken in any bond issue must depend upon the type of bonds and the conditions of the particular issue. The following outline is suggestive of the general procedure.

1. The directors pass a preliminary resolution recommending the bonds and directing the call of a special meeting of

¹Mead, "Corporation Finance," page 85

stockholders to consider the recommendation. Even where the directors have power to authorize a bond issue, it seems preferable and prudent to obtain the approval of the stockholders.

2. A statement of the proposed bond issue is then prepared and submitted for the consideration of the stockholders. This should tell the time to run, how secured, terms of payment, rate of interest, redemption conditions, and all other important details.
3. If the bond issue is approved by the stockholders, their approval is usually expressed in the form of a resolution; although sometimes, when a meeting is inadvisable, the issue is approved by written consent of the individual stockholders.
4. The issue having been sanctioned by the stockholders, the directors pass such resolutions as are necessary to authorize the bonds and their issue in due form by the officers of the corporation.
5. Approval to sell the bonds must now be obtained from the Securities and Exchange Commission. This calls for the filing with the Commission of a detailed registration statement.
6. A trust company is usually selected as the trustee for the bonds, and a contract made for its services.
7. The deed of trust conveying properties to the trustee in trust for the bondholders and setting forth all the conditions under which the bonds are issued is drawn and duly executed by the proper officers of the company.
8. The bonds are prepared. These are usually engraved on a good bond paper with coupons attached, if the issue is of coupon bonds. The trustee's certificate must appear on each bond.
9. If realty is covered by the deed of trust, a copy must be filed in every county where the real estate is located.
10. Sale of the bonds, either direct to the public or through some firm of bankers, is provided for. This is usually done either before the bonds are authorized or soon after. The sale price usually depends on the standing of the issuing company.
11. Provision must be made for the payment of interest coupons at the issuing office or by some bank or trust company.
12. Provision must be made for the redemption of bonds at the date provided by the trust agreement.¹

¹Bennett, "Corporate Accounting," page 200.

98. General characteristics of bonds

A corporate bond is evidence of a loan made to a company and sets forth the conditions under which interest payments and repayment of principal shall take place. Sometimes these instruments are backed only by the credit of the issuing company but generally there is a pledge of certain specific property as security for the payment both of the principal and interest.

It is customary in corporate management to utilize bonds in borrowing funds for a long period of time. This is in contrast to the use of notes which are usually employed in the case of short-term financing. Basically these two instruments are the same, as both the note and the bond represent a promise on the part of the corporation to pay to the individual holder certain sums of money under specific conditions.

Large bond issues preferred—Another characteristic of bonds is that they are usually employed only when an appreciable amount of capital is to be borrowed. This has been particularly true of financing as it has been conducted during the past twenty-five years and is due to the fact that the relative cost of marketing a large issue of bonds is less than that incidental to a small issue.

The amount a corporation must pay in retiring a bond is printed upon the face of the certificate and this amount is known as the par value. In most instances bonds have had a par value of \$1000 but in recent years there has been a tendency toward smaller par values in order to broaden the market by making securities of this type available to the investor of comparatively small means.

Advantages of long-time bonds—There are many factors which go toward the determination of the most

desirable length of time for which a corporation should issue its bonds. This must be determined in advance because the bonds constitute a promise to pay at a specific date. A long-time bond has certain advantages both to the investor and to the issuing corporation. In the latter case consideration must be given to the expense incidental to the issue and sale of bonds, because the oftener this operation is carried on the more costly becomes the financing to the company. Also there is the assumption that a corporation will issue bonds only under comparatively desirable market conditions and if they can be placed with the investing public, it is desirable that they should be left there for a long period of years.

The case of the investor centers largely around convenience and certainty. It is inconvenient for the investor to find a new investment. Often he will experience loss of return during the period while an exchange is taking place. Also it gives him a feeling of security and satisfaction to know that he will receive a permanent and steady yield over an extended number of years. For these reasons the long-term bond can usually be sold on the investment market to better advantage.

Disadvantages of long-time bonds—There are certain conditions under which the issue of long-time bonds may be disadvantageous to the corporation. These situations usually arise when a company finds itself urgently in need of funds and with the investment market commanding a high rate of interest. If the corporation at this time obligates itself over a long period of time, it may find that it is paying a high rate of interest on its bonds when the current market for capital funds dictates a much lower rate. It is not always possible to foresee the trend of interest rates far in advance but often the

financial officers of a business will estimate that within a period of five years a prevailing high rate will cease to exist and consequently they will resort to five-year notes, postponing their permanent financing until later.

One of the greatest fallacies in our financial history has been the extra long terms which have been used for the issuance of railroad bonds. Many years ago it was assumed that the railroads were "permanent" in our economic structure and as a result their securities took on this same fixed characteristic. Many of their bonds were issued for periods of one hundred years. In recent years we have seen the error of this type of financing for with the advent of competing modes of transportation it has been brought home to the investing public that railroads are not a necessary entity in themselves but only one unit in a complete transportation system. Bonds of this type have practically no security as to principal because we know that almost any kind of productive property will exhaust its redemption value within a period of less than one hundred years. These bonds represent nothing more than unsecured promises by the corporation to make certain payments and the investor is assured of a return only so long as the company involved remains in business and is solvent.

Redemption—In addition to the specified date of maturity there is included in almost every bond indenture a provision permitting the corporation to retire the issue at an earlier time. Usually the exercise of this provision on the part of the corporation carries with it a premium payment to the security holder but the corporation may feel that this payment is justified. It is possible that the company will wish to float a larger issue including as its security the property already pledged under the earlier

mortgage, or it may wish to issue new bonds at a lower rate of interest.

In some cases the corporation agrees to redeem a certain portion of the bonds each year and this makes the securities more readily marketable because the investor knows that each succeeding year the margin of safety will be increased and there will be a better market for his particular bond. This method is also well employed to retire bonds wherein portions of the property pledged are exhausted through use in the development of the business. Examples of this would be mining property or timber property. Wherein it is apparent that the nature of the industry would produce the foregoing condition.

99. Classification of bonds

It is extremely difficult to place bonds in specific classifications because the terminology used to describe them is so varied and so indefinite that it is often misleading. The only safe method for the investor to employ is one of careful examination of each particular issue. Even with careful study it is difficult to classify bonds because there are certain characteristics and similarities between various issues which are entirely lacking in others and vice versa. As a result we have a great confusion and duplication in classification with many bonds falling in one or more groups judged by the characteristics in which the individual is interested. Bonds today are usually classified according to the practice of the exchange upon which they are sold and this is the result more of convenient reference than of the basic qualities of the security.

Generally speaking bonds receive their titles from one or more of the following characteristics:

1. Character of corporation issuing
2. Purpose of issue
3. Nature of security given for payment
4. Evidence of ownership and transfer

100. Classification of corporation issuing bonds

This characteristic is used as a basis for general classification. Quotations are arranged under the following heads:

1. Government—state and national
2. Municipal and county
3. Railroad, express, and steamship companies
4. Traction companies
5. Gas, electric light, and water companies
6. Bank and trust companies
7. Investment companies
8. Industrials
9. Mining companies
10. Miscellaneous

101. Classification by purpose of issue

Among the many varieties of bonds which take their names from the purpose of issue, the following may be noted:

- | | |
|-------------------------|--------------------------|
| 1. Adjustment bonds | 12. Interim bonds |
| 2. Bridge bonds | 13. Interest bonds |
| 3. Construction bonds | 14. Purchase money bonds |
| 4. Consolidated bonds | 15. Refunding bonds |
| 5. Car trust bonds | 16. Reorganization bonds |
| 6. Dock and wharf bonds | 17. Revenue bonds |
| 7. Equipment bonds | 18. Subsidy bonds |
| 8. Founders' bonds | 19. Terminal bonds |
| 9. Ferry bonds | 20. Temporary bonds |
| 10. General bonds | 21. Unified bonds |
| 11. Improvement bonds | |

102. Classification according to security

From the point of view of the security given for payment, bonds fall into two general classes. These, in turn, may be subdivided, as is shown on page following:

- I. Unsecured
 - 1. Government bonds
 - 2. Corporation debentures
- II. Secured
 - 1. Personal security
 - a. Indorsed bonds
 - b. Guaranteed bonds
 - 1. Guaranteed as to principal
 - 2. Guaranteed as to interest
 - 3. Guaranteed as to principal and interest
 - 2. Lien security
 - a. By character of property pledged
 - 1. Real property
 - a. Land grant bonds
 - b. Real estate bonds
 - 2. Personal property
 - a. Collateral trust bonds
 - b. Sinking fund bonds
 - b. By character or priority of lien
 - 1. First, second, or third mortgage bonds
 - 2. General mortgage bonds
 - 3. Blanket mortgage bonds
 - 4. Consolidated mortgage bonds
 - 5. Income bonds
 - 6. Profit-sharing bonds
 - 7. Dividend bonds

103. Classification according to ownership and transfer

There are three general classes of bonds from the viewpoint of evidence of ownership and these are:

- 1. Coupon bonds
- 2. Registered bonds
- 3. Registered coupon bonds

Coupon bonds are those wherein the contract for the payment of interest is repeated for each interest payment date on a series of small coupons attached to the general contract. These coupons are dated consecutively with the various interest payment dates and they must be detached when the date of payment comes due

and presented for payment just as the holder would present any promissory note. They are payable to bearer and are usually collected through the banks just as a check or draft would be and are subject to similar treatment in case of non-payment by the issuing company. They must be accompanied by a certificate of ownership required under the Federal Income Tax law. It is in this way that the Bureau of Internal Revenue is able to check on the ownership of obligations of this kind.

Registered bonds are credit instruments, the interest obligation on which is expressed in the same writing or paper as in a promissory note, and the ownership of the bond is registered as a means of protecting the payee against loss. In the case of registered bonds a formal transfer and registration must take place if the owner wishes to sell his security. The old bond is cancelled and a new one is issued and registered in the name of the new owner. Interest is paid by check or money transfer in the same manner that dividends would be paid by a corporation on its stock.

Registered coupon bonds are a combination of coupon bonds and registered bonds wherein the principal is registered but the interest is payable to the bearer through the medium of coupons as described above.¹ It is possible for a single bond issue to have any or all of the foregoing characteristics or any combination of them so long as the provisions do not conflict.

104. Important types of bonds

In order to impress upon the student the great variety of bonds which may be found on the market, the

¹The foregoing classification of bonds is adapted from F. A. Cleveland, "Classification and Description of Bonds," *Annals of the American Academy of Political and Social Science*, XXX, pages 400-411.

comprehensive and detailed classification given above has included as many characteristics as possible. For purposes of practical discussion it is desirable to consider only those types with which the business executive or investor is likely to come regularly in contact. These are as follows:

1. Mortgage bonds
2. Equipment trust bonds
3. Collateral trust bonds
4. Debenture bonds
5. Income bonds
6. Guaranteed bonds

105. Mortgage bonds

The most common type of bond sold in the United States is the mortgage bond which means that it is secured by an accompanying mortgage on certain specific property. One reason for the popularity of these bonds in this country is that the American investor who buys bonds is primarily interested in security and he finds this most definitely fixed in the mortgage bond.

Almost any type of manufacturing corporation finds itself in possession of certain real estate and equipment which it can use as a pledge for payment of its obligations whether they be interest or principal in connection with a mortgage bond issue. Where new companies have not yet established a firm credit it is the only class of bond which they can sell to advantage.

The relationship between a first mortgage bond and a second mortgage bond is exactly the same as that which exists between a first mortgage and a second mortgage on real estate. Consequently the second or third mortgage bonds are looked upon with disfavor but even so there are instances where the holdings of a corporation

are adequate and permit them to issue these securities. A variety of descriptions and titles have sometimes been used to mislead the investor and draw his attention away from the fact that an issue does not in reality involve a first mortgage. These practices could not be carried on today under the supervision and careful scrutiny that the Securities Exchange Commission exercises over the issue of all securities.

In the case of industrial corporations the practice was not so marked as with railroads. It has been customary for industrial corporations to make all bonds of equal rank and to secure them under a first mortgage on all of the property of the company. The claim of second and third and later mortgage bond holders is inferior to that of first mortgage bond holders in the payment of interest. When earnings are not sufficient to pay on all of the issues, the interest on the first mortgage bonds is paid first, the second next and so on. In the division of assets in the event of the liquidation of a corporation the distribution is made in the same order.

The banking houses interested in the issue of junior mortgage bonds have employed a variety of devices to permit them to avoid the use of "second," "third," etc. The terms most frequently used are "general," "consolidated," or "refunding." The investor does well to investigate bonds carrying this terminology in order to determine whether they are subject to the prior claims of senior issues.

106. Ratio of mortgage to value of property

In borrowing money wherein property is used as collateral and a mortgage is established against this property, it is necessary for the lender to determine the

amount which can be loaned with comparative safety. The ratio of the amount of the loan to the appraised value of the property is spoken of as the property borrowing capacity and it was thought possible to reach a fixed percentage. Experience of the past fifteen years has caused some rather violent revision in the idea of the safety of mortgage loans. It was customary for savings banks in the State of New York to make loans up to 60% on improved property and up to 40% on unimproved property. With the advent of the recent depression it was found that these percentages were far from safe and great losses were suffered in connection with loans made on the foregoing basis.

There is a second feature which really controls the first. This is the danger of inaccurate appraisal. Even in cases where the established ratio appeared safe it was found in tracing back that the overappraisal of the property was the basic cause for the rapid fall in value between the time the loan was put into effect and the time the mortgage was foreclosed for collection.

It has been generally accepted that a margin of 40% is sufficient between the cost of improvement and the amount of bonds issued in connection with improvement financing by a manufacturing concern. Where new companies are concerned a margin of from 50% to 60% has been considered sufficient.

107. Equipment trust bonds

Equipment trust bonds are used primarily as a means of purchasing rolling stock for railroads and street railway companies. There are several modifications of this plan but the one which most often is encountered is that wherein the railroad company purchases equipment upon

which it wishes to make payments on an installment plan and this is accomplished through the medium of a lease. The property acquired in this way is used as security for the bonds which are also direct obligations of the operating company. Title to the equipment is held by an outside individual or trust company which receives certain payments in return for which the railroad company is permitted to use the equipment. In addition to the amount paid for use which is sufficient to cover the interest charges on the bonds there is a payment made on principal and when all such payments have been completed the railroad company has in effect purchased the rolling stock and title to it is then vested in the operating company. In addition to the payments which it must make the railroad company agrees to keep the equipment in good repair and to replace any part of it that may be destroyed during the life of the contract. The rental referred to under the agreement consists of three parts: first, a portion which represents the expenses and profits of the syndicate which acquired and held the equipment; second, a sum to cover the purchase price of the equipment; and third, interest on the unpaid balance of the purchase price.¹

Security of investment—Equipment trust certificates are considered an extremely safe form of investment because they are both general debenture bonds of the railroad and they have the additional security of specific equipment that has been pledged. There is also an indirect security due to the fact that it is impossible for a railroad to operate without its rolling equipment and therefore it must exert every effort to retain it in its possession. The railroad will be inclined to slight almost

¹Mead, *Corporation Finance*, page 434, et seq.

any other form of obligation in order that the interest payments on the equipment bonds may be met when due. The rolling stock is interchangeable and can easily and quickly be transferred to another railroad in the event the first company fails to meet its payment. This means there is a broad market for the rolling stock, and it is very desirable as a type of collateral.

108. Collateral trust bonds

Collateral trust bonds are bonds which are secured by other bonds or stocks deposited as collateral. It is customary to utilize stocks and bonds as collateral for short-time notes but it is not so often encountered in the floating of long-term obligations. The issuing company usually deposits the stocks or bonds of another company as collateral for its own long-term obligations because there are certain inherent weaknesses in the use of other issues of its own securities. This is particularly true where stock is used.

It is obvious that the stock of a corporation which has defaulted in payment on its bonds will be of practically no value and consequently becomes automatically undesirable as collateral. When the deposited collateral is of another company the bonds may be said to be only as good as the securities which have been deposited to cover them, although there is the additional implied protection to the bondholder of the general credit of the issuing company. Because of this double security it is often possible to float collateral trust bonds at a fairly good price and at a comparatively low rate of interest. The income from the collateral ought to be more than sufficient to pay the interest on the new bonds and the difference is the gain which comes to the company issuing

the collateral bonds in return for its assumption of the risk of issuance.

It is not regarded as good practice to have the collateral trust issue exceed 80% of the value of the collateral although this is not a fixed figure and the amount varies from one issue to another. There is usually a provision that if the value of the collateral falls below a certain market figure additional collateral will be deposited as security. Also if any of the deposited collateral matures at a date prior to the maturity of the bonds it is customary to make some provision for replacement.

Collateral trust bonds are used frequently to acquire subsidiaries or to do some financing when subsidiaries' securities are unpledged under other mortgages. In the former case the stock of the purchasing company is deposited as collateral for bonds sold to obtain funds with which to pay for the stock. Funds may be obtained temporarily by borrowing the money from a bank or other sources to pay for the controlling interest in the stock, this bank loan being secured by the stock itself and to be paid off by the proceeds from the sale of the bonds. In many cases it is necessary for the purchaser to provide a part of the purchase price because the bonds cannot be issued to the full amount of the collateral.¹

The second employment for collateral trust bonds is to avoid the marketing of a large number of small bond issues. For example a holding company may issue its own collateral trust bonds, using the first mortgage bonds of its subsidiary operating companies as security. The costs of marketing the single large issue are much less than those incidental to several small issues and it can usually be sold to yield a lower rate of interest because it

¹Gerstenberg, "Financial Organization and Management" page 238.

represents the security of the combined strength of all of the operating companies in addition to the credit of the holding company.

When business organizations find that it is necessary to raise funds in the face of restrictions imposed by the after-acquired property clause of former mortgages, they frequently form a new subsidiary to hold title to additional property which is to be acquired. It is difficult for these small, highly specialized corporations to market their own securities but it is often possible for them to be brought together for an issue of collateral trust bonds of the parent company. A condition also arises wherein corporations have deliberately planned to evade liability for damage. In these cases the parent company holds not only the stock but an issue of mortgage bonds equal to the value of the property owned by each separate subsidiary corporation. This subterfuge is resorted to so that in case of an adverse decision in a suit for damages the parent company need only to foreclose on its mortgage bonds and to take over the property, thus eliminating the necessity of paying on the damage verdict. The bonds issued for this purpose may also be used as security for a collateral trust bond issued by the parent company.

109. Debenture bonds

A debenture bond is difficult to define because the term is used in connection with many different types of securities. Generally it refers to an unsecured obligation which is merely a promise on the part of the corporation to pay. In cases of this sort the debenture bond is the equivalent of an unsecured note and nothing more. A debenture bond has the same standing as a note and to this extent is a legal obligation of the company.

A debenture may not be used as a basis for foreclosure since there is no specific property pledged upon which it is a lien. In the event of bankruptcy it becomes the equivalent of any other unsecured claim against the corporation. However, it is superior to claims by all classes of stockholders just as any other obligation of this type would be.

There has been a tendency in the United States to avoid the issuance of debenture bonds because the market for this class of security has never been a broad, firmly established one. The American investor looks with more favor upon the mortgage bond.

In England the debenture bond has been used extensively and one reason behind this difference is probably the fact that credit has not become standardized in the United States as it has in England. In the rapidly developing economy in the United States in recent years, it was necessary for each purchaser of a bond to investigate the credit situation of the issuing company; and he was relieved somewhat of this activity if specific property of a known value could be pledged as additional security for the obligations of the company. In England it has been customary for bonds to be issued only by old and well-established firms whose credit rating and financial condition is well known and unquestionable. Consequently it has not been necessary for the English investor to place so much emphasis on the security behind a particular issue of bonds.

The debenture has been employed in the United States for purposes of railroad organization where it became necessary to scale down the claims against the assets of the company. The creditors have usually accepted the debenture bonds in exchange for secured claims in order

to make it possible for the railroad to obtain sufficient funds to continue operation. If they had not consented to do this, the road would probably have been forced to cease operating.

There are many types of business enterprise wherein goodwill represents one of the chief assets. In cases where it has become necessary to raise additional funds these companies would find themselves with comparatively small amounts of real property available for pledging in connection with an issue of mortgage bonds. If such a company were well established and had a high financial and credit standing, it could sell its debentures despite the lack of specific property to pledge as security.

110. Income bonds

Income bonds are bonds which do not bear a fixed rate of interest but participate in the distribution of the profits of the issuing corporation. They occupy a peculiar position in the financial organization of companies who utilize them and their employment is resorted to in only a few instances. It is impossible to know whether to regard the payments made on income bonds as interest or dividends because payment depends upon the company earning the necessary profits. Also payment is made on a basis of the judgment of the directors who must decide whether the earnings can be regarded as final. The bondholders however have a certain protection in court if they can show that the directors have been acting in bad faith and have withheld payments which were rightfully due. Income bonds have a claim to assets which is prior to that of preferred stock. In some instances the principal has been secured by a second or third mortgage or by collateral deposited with a trustee.

There is nothing distinctive about an income bond so far as classes of securities are concerned. The general provisions referred to earlier in connection with other types of bonds may be applied here. Usually preferred stock is preferable to the income bond from the viewpoint of the issuing corporation, but there have been cases where the latter security has been extremely useful in affecting reorganization when the object has been to cut down fixed charges. The owner enjoys the security of principal which goes with a bond but his percentage in profits carries the dividend features of a preferred stock.

111. Guaranteed bonds

A guaranteed bond is one which originates as a mortgage bond and then acquires the additional protection afforded by the general credit guarantee of some other corporation.¹ The guarantee may cover interest and principal or it may be for interest alone or for principal alone. In order to be effective this guarantee must be in writing and must either be written on or attached to the instrument itself. Here again we have a type of security which is most frequently used in connection with railroads. Under proper conditions these bonds are legal and can be used to advantage, but from the viewpoint of the investor the guarantee may be worth much or little. For example in the past corporations have been known to issue securities which were referred to as guaranteed bonds, but the guarantee had no value whatever as it involved only a promise on the part of the corporation to pay while it was already legally obligated to pay. It is unlikely that securities of this type could be issued today since the subterfuge would be discovered by the Securities

¹Hoagland, "Corporation Finance," page 86.

Exchange Commission and the attendant publicity would destroy the market for the bonds. Usually the guarantee runs from a parent company to a subsidiary and is employed in order to bolster the credit standing of the smaller company.

Convertible bonds—The purpose of a convertible issue of securities is to make them more attractive to the investment market. Generally speaking the convertibles are from the more secure less speculative stock or bond to the less secure and more speculative type. It has been quite common for unsecured bonds to be convertible into preferred stock carrying a higher rate of interest or into common stock, or for secured bonds to be convertible into unsecured debenture bonds and into stock. The purpose behind the whole operation is to hold out the appeal to the purchaser of a participation in larger profits of the corporation in case they should eventually be realized. In the meantime he has the security which the former obligation affords.

Convertible bonds have been used in corporate finance for about eighty years. In the middle of the nineteenth century, they were used by such notables as Daniel Drew and Jay Gould. At the beginning of the twentieth century, they were used by E. H. Harriman in building up the Union Pacific Railway system. In this latter case, debenture bonds convertible into common stock were sold at a price in excess of the current value of the stock. The proceeds from the sale of the bonds went into improvement and expansion of the railroad. As a result, earnings increased so greatly that eventually the market value of the stock exceeded the face of the bonds and they were of course converted into stock; thus the liability was disposed of without the disbursement of any cash.

The provisions governing the convertibility of bonds must include the following:

1. The type of security into which the bond may be converted
2. The conversion ratio—that is, the number of shares (or fraction of shares) of stock which can be secured for each bond
3. The period of time during which the conversion privilege may be exercised

Ordinarily the conversion ratio is “par for par,” though in a few cases the par value of the stock to be received exceeds that of the bonds to be converted. More recently, with the increasing popularity of no-par stock, the conversion ratio is stated in terms of number of shares rather than par value. The conversion period usually extends to the maturity date of short-term bonds, but only over a part of the life of long-term bonds.

From an investment point of view this union of apparent security with possible increase of value is a mistake. The investor for income is required to pay for the conversion privilege which he does not care for, and the speculator is required to pay for apparent security, which he does not want. Moreover, convertible bonds of unsubstantial security may often command a market price, through the presence of the conversion privilege, which brings them into the class of bonds of high security. In this manner the investor deceives himself into believing that the convertible bond is a higher security than it is, or else deceives himself into believing that he is getting the conversion privilege without paying for it—getting something for nothing.¹

¹Arthur Stone Dewing, “The Financial Policy of Corporations,” pp. 231-232.

Chapter XI

Capital Secured by Means of Notes

112. Long-term bonds and short-term notes

In obtaining funds for the conduct of its business a corporation is more likely to resort to an issue of bonds than to utilize a direct mortgage. In raising funds through bonds the business usually covers a large portion of its fixed capital needs and sometimes in addition will raise a part of its working capital. The costs incidental to the floating of an issue of bonds are rather great and therefore it is advantageous and saves money for the corporation for its bonds to run over a relatively long period of time.

In addition to the capital raised by these long-term securities it is often necessary for the company to have additional funds which it will need for a period of time much shorter than the ordinary life of a bond. If the period is greater than that ordinarily found acceptable to banks or commercial lending firms, or if the amount is too large to be handled by this class of lender, the corporation may resort to the selling of notes to the public. In this chapter a description will be given of the nature of these notes and the procedure employed in securing funds through their issuance.

A note and a bond are actually the same thing from the legal viewpoint as each represents a written promise for the future payment of money. From the financial viewpoint there are distinct differences. These involve particularly the following:

1. Time for which issued
2. Denominations in which they are issued
3. Security
4. Formalities surrounding their issue

A note is usually issued for a period of time that is much shorter than a bond. Notes customarily appear in smaller denominations. This latter statement held true up to the time of the war but the situation was altered somewhat by the advent of Liberty bonds. The general public acquired the habit of purchasing these bonds in comparatively small amounts. The outgrowth of the movement was a type of security that today is known as the "baby" bond but these are still not generally used and it is safe to say that the large issues of bonds still tend to appear in relatively large denominations.

It was pointed out in the preceding chapter that bonds are generally secured by a mortgage although there are some instances where debenture bonds are issued which represent only a promise on the part of the corporation to pay at the date of maturity. Notes may also be secured by collateral but generally speaking this is not the case.

Notes may be issued with no more formality than a verbal agreement between the seller and the purchaser, whereas bonds are usually issued under a deed of trust, which is a formal document stipulating various requirements which must be met by the corporation. Notes of a business may be classified as follows:

1. Issued to merchandise creditors
2. Issued to banks as a basis of bank loans
3. Sold to the public

Notes issued to merchandise creditors and to banks are discussed at length in the succeeding chapter under

current liabilities. The present chapter will deal only with notes sold to the public and these may be divided into long-term notes and short-term notes.

113. Long-term notes

There is no generally accepted point setting up the dividing line between short-term and long-term notes. For the purpose of our present discussion it will be assumed that a note running a year or less is a short-term note, while those running for more than a year will be treated as long-term notes. This classification is that employed by those interested in selling this type of security. There are two classes of brokers known as note brokers and investment brokers and the former generally handle securities of less than one year's maturity while the latter handle those of a longer period.

115. Reasons for issuing long-term notes

Corporations may find it desirable to issue notes running from five to ten years for the following reasons:

1. Because current interest rates are so high that it is too costly to issue bonds immediately.
2. Because of the need for additional capital for a short period of time.

116. Short-term notes

When short-term notes are to be offered to the public it is customary to issue them through note brokers. By "offering to the public" is meant that the notes will be sold to persons other than the bankers of the issuing company. This does not mean that bankers will not buy these notes because it is often found that most brokers are selling notes to bankers. With the short life of notes

which are sold through note brokers they are properly classified as current liabilities in which case they should be treated in the succeeding chapter. They are included under the present discussion because in many respects both the nature and purpose of all notes sold to the public are similar.

In the sale of short-term notes two methods are employed. The larger firms of note brokers usually purchase the notes and sell them at a slightly higher price than they have paid, whereas the smaller firms are more likely to sell on commission. The basic reason behind this divergence lies in the fact that a large amount of capital is needed to purchase all of the notes which a broker handles. The large firms can establish a credit standing of their own and borrow funds from the banks with which to effect a large part of their purchases.

The market of the note broker—The best market which the note broker has is the banks. Within this group he has two classes of customers: the first is the large city banks which often resort to notes as a means of investment for surplus funds; his second market lies in the small town banks. The latter outlet is a better one in the long run for the note broker because the small town bank does not have the wide investment opportunities of the large banks and therefore the former group more frequently resort to notes. The notes also come as a great convenience to the small town banks particularly in agricultural communities where they find themselves with a large surplus of funds for a comparatively short period of time immediately following the harvest of farm crops.

It is assumed that a note broker investigates thoroughly the financial condition and credit standing of any

firm before he consents to purchase its paper or to sell it on commission. The company usually supplies him with a balance sheet and a statement of profit and loss prepared and certified by a public accountant. He will also use the mercantile agencies to determine as accurately as possible the credit rating of the firm and he will investigate its standing in this connection in the community in which it is situated and with the people with whom it deals. The broker will then place all of his assembled information before his banker or other client so that the latter is able to reach an intelligent decision concerning a purchase. Unfortunately many bankers are unable to interpret this information and have to rely upon the integrity of the note broker whose recommendation they will follow. This relationship is fairly sound if the bank deals regularly with the note broker as it is the accepted practice for him to assume the loss himself in case of default on the part of the issuing company. The note broker is likely to be much more exacting in his investigation and in his requirements than is the case with the average banker because there is generally no personal relationship between him and the company in whose commercial paper he is interested. It is comparatively easy for note brokers to dispose of notes they have purchased once they have built up a reputation with the banks for reliability and integrity.

Function of the note broker—The bankers regarded the note broker with disfavor when he first appeared in the financial picture. Up to that time the banker had had a comparative monopoly in the field of short-term notes and he felt that the note broker was a useless and undesirable intruder in this field of business. In an effort to maintain their monopoly some bankers

went so far as to let it be known that they considered the credit standing of a firm impaired if it had resorted to note brokers for the sale of its notes. This feeling has almost entirely disappeared in recent years and it is now admitted by most people in financial circles that the note broker performs a very useful function.

117. Security behind corporate notes

It is very rare to find collateral security employed in the case of short-term notes such as those sold through note brokers, although collateral may be employed and quite frequently is in connection with long-term notes. The value of unsecured notes rests entirely on the general credit of the company which in turn is based upon the financial condition and earning capacity of the business. Since such notes are issued to meet temporary needs and are to be paid at maturity it is not expected that they will be refunded as bonds are in many cases. Consequently corporations endeavor to pay short-term notes regardless of other obligations because the failure to do so will seriously affect their credit standing. This attitude on the part of the borrower gives added security to the purchaser of these obligations.

Purpose of note issues stated—Businesses issuing short-term notes usually state the purpose for which the funds thus obtained are to be employed and as a result investors can judge the soundness of the disposition to be made of the proceeds.

One of the chief factors to be considered by the purchaser is the earning power of the corporation. A record of satisfactory profits indicates that the assets are productive and consequently satisfactory security for a loan. It also indicates that the corporation is in a sound condi-

tion and will probably have funds available to pay the notes at maturity.

118. Dangers in use of corporate notes

The too frequent and unwise use of short-term notes by a corporation may eventually prove to be embarrassing. If a note issue fell due during an unfavorable period in the money market, the securing of funds for payment might thereby be rendered difficult. This would only be likely to happen if funds obtained had not been well utilized and the company had not enjoyed a return sufficient to liquidate the investment at maturity. Despite this danger the use of short-term notes has increased in recent years, because some types of business have found this a convenient way to finance certain operations.

The note broker must guard against corporations issuing notes where the funds are not to be used productively and the notes are not covered by a large surplus of quick assets. The only case in which an issue under such conditions is justifiable is when the company has definitely planned to issue bonds or stock to take care of the retirement. This may be resorted to when conditions exist under which a high rate of interest would have to be paid for a longer term loan. The notes are then used to meet the needs of the company in the intervening period while waiting for the long-term security market to become more favorable. It should also be pointed out that if the financial market is such that the notes cannot be sold, except at a price which yields a higher interest rate than bonds, it is better to sell the bonds at once. This would hold true even if the notes are only for a short period of time both because of the additional interest cost and the probable difficulty of refunding.

Chapter XII

Current Liabilities as Sources of Capital

119. Relation of current liabilities to working capital

In every business the total capital exceeds the sum of the fixed assets and the net working capital. This is due to the fact that there are certain assets which are secured by the contraction of current liabilities. By referring to the Balance sheet, page 83, (top folio), it will be seen that the fixed assets plus the net working capital equal \$420,000, which is equal to the total of the long-time liabilities and the proprietorship of the business. Total assets of the business are \$477,000 or \$57,000 more than the sum of the fixed and the net working capital. As indicated in the balance sheet, these assets are offset by the \$57,000 in current liabilities which represent that portion of the capital of the business being supplied by the short-term creditors. In most businesses, a similar condition exists, and it therefore becomes necessary for us to consider these current liabilities as a source of capital.

120. Kinds of current liabilities

Most businesses will show in their accounting records three major types of current liabilities. These are as follows:

1. Accounts payable
2. Notes payable
3. Trade acceptances

Accounts payable—There are various ways in which accounts payable may arise, but usually they are incurred as a result of the purchase of merchandise. As this method of acquiring accounts payable is so predominately found, it can generally be assumed that this item is representative of goods acquired on account.

Notes payable—In the previous chapter the types of notes payable within a business were classified as follows:

1. Issued to merchandise creditors
2. Issued to bankers
3. Sold to the public

Trade acceptances—As in the case of accounts payable trade acceptances usually arise as a result of the purchase of merchandise. The person selling goods is known as a vendor, and he draws a draft on the purchaser who is known as a vendee. The draft becomes an acceptance when the vendee signifies his intention of paying at the time and place specified. He indicates his willingness to pay by writing his acceptance across the face of the draft. The entire process of drawing a draft and the method used in accepting it are described in detail in Chapter XIII.

121. Trade credit

“Trade credit” is used descriptively in business to include accounts payable and notes and acceptances issued in the purchase of merchandise. From the accounting viewpoint this activity involves an addition to the stock of merchandise and at the same time the assumption of current liabilities in connection with the payment for this merchandise. It is necessary to distinguish among the liabilities of the business between trade credit and

notes which are issued to banks or sold to the public through commercial paper brokers. Trade credit is a liability that has been incurred through the acquisition of merchandise, while the notes are liabilities incurred in order to secure funds for the payment of the trade credit liabilities. As will be explained later, it is often profitable to borrow funds from the bank with which to liquidate obligations due to merchandise creditors if the latter are willing to offer a liberal discount.

In the end all current liabilities are incurred because of the purchase and sale of the commodity or service in which the business deals. The preceding distinction is made in order that a better understanding may be had of each type of current liability and the reason for the choice between the different kinds.

122. Use of trade credit

In dealing with the methods of securing capital it should be clear from the foregoing distinction that trade credit is a source which is employed by almost every business in securing operating funds. The amount of current liabilities keeps changing, and it is sometimes difficult to realize that capital is being provided in this way. Actually there is always a certain amount which is in the hands of the company and which is being utilized in carrying on its business. There is a variation in this item as between companies, but in the case of most organizations it is of considerable importance.

Because of the constant movement and the variation in amounts, many businessmen fail to grasp the fact that capital is being provided in the foregoing way. In the relationship between the manufacturer, wholesaler, and retailer, trade credit forms the basis for nearly all of

their commercial transactions. In order to understand this clearly we may work the operation backward from the ultimate consumer who purchases from the retailer. A considerable portion of goods thus acquired by the consumer is purchased on credit. This places the retailer in the position of needing a similar extension of credit from the wholesaler who needs a corresponding period of time in which to settle for his own purchases from the manufacturer. A brief consideration of this entire operation will show that the burden is constantly shifted backward until it reaches the manufacturer. He must bear the entire cost of financing the movement into consumptive channels as a necessary operating cost of his business.

There has been a change and variation in some lines of business. For example, in the drug and chain store field nearly all retail sales are made for cash. Here it becomes unnecessary for the wholesaler to extend the usual amount of credit to the retailer or for the manufacturer to extend it to the wholesaler. The resulting ability on the part of retailer to pay cash permits him to profit from discounts which gives him an advantage in the competitive market. There are other firms engaged in the wholesaling and retailing of merchandise whose capital structure permits the prompt liquidation of all obligations.

There is no set rule as between lines of business or even within certain types of activity and there are almost as many variations in credit practices and credit terms as there are business relationships between firms in the distribution field. Despite the exceptions which have been noted it may still be said with safety that the general practice in the relationship of the retailer, whole-

saler, and manufacturer, is to employ the trade credit structure described above.

Continuous nature of credit—There is a continuous movement in the credit structure of business which keeps the amounts in a state of change. This is due to the fact that the dynamics of our economic system or the development of business in our industrial society have brought about a constantly increasing use of credit. Our modern economy is so firmly based upon a credit structure that it would be virtually impossible for us to carry on at our present rate and under our present mode of operation if this element were removed and we had to resort only to cash transaction. In the case of some small businesses a large portion of the activity may be conducted for cash but if the business grows, credit assumes greater and greater importance. This is particularly true in the corporate form of business wherein the demands are greater and also where the opportunities for securing credit are better organized.

As a result of this continuous flow and use of credit, there has been developed a very sensitive organization of credit facilities within the business and banking world. The credit situation is so intimately tied up with the operations of almost any business that the slightest break in the entire chain is likely to have effects which will be felt in very remote quarters. The history of banking and credit in the United States brings to light many panics which have caused sharp contractions in business operations and in many cases tremendous losses. The departments of the government which have been entrusted with the management of our money and credit structure have constantly been on the alert to find ways and methods which might be employed in reducing this

danger. The Federal Reserve system was designed largely with this purpose in mind. It was organized to exercise certain control and restraint upon the banking and credit situation in the country so as to minimize the adverse results resulting from financial panics or lesser disturbances of a similar character.

How credit operates—In order to understand clearly the need for credit, it is necessary only to think of the case of the purchaser of goods who is engaged in a business wherein his income is confined to a specific season of the year. The outstanding example is the farmer who is paid for his crop only at the time of the harvest and his problem is intensified as the variety of his "money crop" decreases. Fruit growers or wheat farmers who confine their activity largely to a single "money crop" find themselves in a position where they need credit during almost the entire year of their operations. The merchant who supplies these people with goods knows that it is necessary to extend credit if he is to obtain the business, and in the past he was prepared to either take the note of the farmer to extend credit on an open account. The retailer was forced either to supply funds or to find credit facilities that would permit him to carry on and the customary method was for him to call upon the wholesaler until such time as the retailer's customers were able to effect a settlement. If we assume that the retailer acquired his goods through payment by note, the wholesaler had to ask the manufacturer in turn to await the maturity of short-term obligations which he held before final payment could be made.

Rise of cash discounts—Up to the middle of the 19th century, the relationship described above existed generally through the country, but since that

period there has been a constant decline in this type of operation and a tendency for settlement to be made on purchases over shorter periods of time. Under the old system the merchant was to a large extent the banker of the community and he accepted promissory notes to a greater extent than is the case today. Subsequent to the Civil War it was necessary that the unsettled financial conditions of the country be put in order, and with this increased orderliness the banks began to play a greater part in financing businessmen in the conduct of their regular activities. It had seemed unwise for merchants to extend long-term credit under the uncertain post-war conditions, and in order to terminate the transactions more quickly it became the practice to offer discounts to debtors and to obtain payment before the time specified on the invoice. This system of discounts has been extended until today it is a general and normal condition of payment.

It was with the advent of this possibility of saving money through more prompt settlement of indebtedness that merchants began to find it profitable to borrow from the banks in order to liquidate their accounts. This meant that the bank began to play an important part in commercial finance, and large amounts of notes of this character began to find their way into the portfolios of banking institutions. The real effect was that merchants were now issuing notes to their bankers instead of to their merchandise creditors. It is not customary in most retail businesses for customers to give notes in payment except in those instances where the objective is to liquidate an overdue account.

In lines of business where because of slow turnover it is considered desirable to grant long-credit terms, the

notes payable will appear upon the balance sheet as a large item. Companies resorting to this practice include those who deal in farm machinery, plumbing supplies, printing, and bookbinding, railway supplies, and wholesale jewelry. In other instances it is considered undesirable to have a large amount of notes payable.

It is desirable to have notes payable classified on the balance sheet in order that a distinction may be made between notes issued to banks, those issued to merchandise creditors, and those disposed of through brokers. All of the foregoing conditions must be considered in determining the financial condition of a business.

123. Reasons for use of trade credit

There are certain hazards which the seller encounters in connection with the extension of credit, and he must expect to meet these regardless of the care which he has exercised in the selection of his credit customers. There are outside conditions that may make settlement more difficult for the buyer than anticipated, and it is impossible for the seller to estimate these. He must expect to assume a certain amount of collection cost, and in addition there will be a portion of his accounts through which he will incur loss when they prove to be uncollectible. This condition means that the seller must have more capital in order to conduct his business than would otherwise be the case. In view of the foregoing it would seem that the seller should look upon the extensive use of trade credit as something quite undesirable.

It is necessary for any merchant to consider the wishes and desires of his customer, and thus the situation regarding trade credit is very largely removed from the control of the seller despite his assumption of the burden.

Customers like the confidence and informality which they obtain through the use of trade credit and they are inclined to purchase goods through outlets wherein this type of arrangement can be made. In retailing this situation is partially due to the payment of regular salaries to most working people. It is convenient for these people to settle at a regular period and they expect the merchant to carry their accounts through the intervening time. With the development of this method of operation it has become customary for the merchant to treat this credit expense as a selling cost and to endeavor to add it to the price of the goods sold.

While the use of trade credit has developed to a point where it will probably continue for an indefinite period of time in approximately its present form, there has been some change in recent years. This change came with the advent of the chain store and the unit cash outlets which have grown up as competitors to the chain. In stores of this type the merchant is able to eliminate the collection cost and usually passes at least a part of the savings on to the customer in the form of lower prices. In other words, if the customer is willing to forego the convenience of trade credit, he receives a return through the saving in the cost of his purchases.

124. The trade acceptance

The trade acceptance has come into great favor and prominence during recent years and in fact has been so successfully employed in some types of enterprise that many individuals have come to regard it as an important aid to the entire conduct of business affairs. The trade acceptance is a specialized form of draft and is specifically defined by the Federal Reserve Board as "a bill of

exchange drawn by the seller on the purchaser of goods sold and accepted by such purchaser." The use of trade acceptances has been encouraged by the Federal Reserve Board, as well as by many bankers, because of the feeling that it carries with it certain advantages over other types of credit operation. These advantages are as follows:

1. It makes the discounting and realization of accounts possible.
2. It enables the bank to loan only for proper purposes.
3. It prevents over-buying and over-extension of credit.

In addition to the foregoing results there is the possibility of relieving the seller from acting in a capacity which is not inherent in his business. The description of the generally accepted method of extending credit showed that the seller is placed in the position of also acting as a lender. This has developed because of outside forces and is not a part of his business as originally planned. He has been forced by the demands of his customers to accept a function which has no direct bearing on the actual selling of either the raw product or the finished article. He also has been placed in the position of "carrying" his customers which in turn has made it necessary for him to secure a greater amount of funds for the conduct of his business than would normally be the case. With the development of the use of the trade acceptance the bank assumes more and more this function of providing funds with which to finance the sales transaction. This is accomplished by having the seller present to the bank for discount the trade acceptance that he has received from the buyer. In an earlier paragraph reference was made to the undesirability of carrying a large accounts receivable

item. Through the use of the trade acceptance the merchant is permitted to keep this at a minimum by letting the bank perform its normal function of supplying funds with which to finance the business operation. There have been many instances in the past where a crop failure or an industrial disorganization has made it impossible for the consumers to meet their obligations as they had planned. As a result the retailer has suffered financial embarrassment which has in turn often been passed right down the line to the wholesaler and manufacturer. In many cases this has caused bankruptcy and failure in the mercantile field.

Acceptance shows purpose of loan—It is always desirable for a bank, charged as it is with the responsibility of handling other people's funds, to know as accurately as possible the utilization of funds which have been placed in the hands of a customer through a loan. In the case of loans to merchants under the older system of discounting notes, there was little opportunity for the bank to know specifically the purpose for which the funds were to be used. There have undoubtedly been many cases where the manager of a commercial enterprise has resorted to borrowing with the implied purpose of utilizing the funds for the covering of trade credit when actually the funds have been put to other uses. As a matter of public policy this is undesirable if we assume that our commercial banking organization is designed to aid only in productive enterprise. The trade acceptance states definitely upon its face that it has arisen out of a buyer and seller transaction wherein there has been a transfer of title to certain merchandise. A general use of this type of instrument gives the banks a better control and knowledge of the channels in which funds have

been placed because of the definiteness which attaches itself to the trade acceptance.

There is also the indirect advantage of making the purchaser more conscious of the condition of his stock as the payment of accounts in full at a definite time will mean that the buyer is less likely to resort to overstocking. In the past there have been firms which have developed the undesirable habit of buying without discretion and incurring almost any amount of obligations. The utilization of trade acceptances will help to overcome this because the consciousness of a number of drafts due to be paid within a certain specified period will act as a deterrent. In the long run a very beneficial effect upon the business world should be felt through a reduction in the number of bankruptcies in commercial enterprises. An increased care in buying which keeps the purchasers more within their borrowing capacity is bound to be reflected through the entire economic structure. If a department store has a certain number of trade acceptances outstanding and knows that these will come due within a definite period, it is possible for the store to limit its purchases in line with a definite amount of these obligations. As soon as its quota has been reached purchases will automatically cease. Under the old system of open accounts the firm might have gone on incurring obligations through the acquisition of greater quantities of merchandise feeling that it could postpone the payment of some of its bills.

125. Notes issued to banks

It has been customary ever since the advent of the merchandise discount policy described as in practice since the Civil War for manufacturers to borrow sums

from the bank to take care of goods sold on an open account. In the preceding paragraph attention was called to the fact that this practice might bring about difficulty in the country's credit structure and interfere with the free flow of funds. There are two reasons why this is true: (1) Credit may be obtained improperly as a result of insufficient information given to the bank; and (2) the funds thus secured may be improperly used.

The financial report demanded by commercial banks is well known to modern businessmen but its adoption has been comparatively recent among the banks of the country. The commercial banks have two obligations, one to their depositors and a second to the business interests of the community. The guarding of the depositors' funds must always be paramount and there is every reason why the bank should scrutinize with care each request for a loan before taking action. In the past businessmen took the attitude that a bank should respond in the affirmative to every request for funds and the banks in far too many cases did grant credit upon the mere demand of the customer. The underlying cause for this questionable operation lay in the fact that loans were usually granted on a basis of the customer's reputation rather than upon a definite and certified financial statement.

It is customary now for commercial banks to have the borrowing company or individual furnish both an income statement and a balance sheet. The banker is then placed in a position to judge the soundness of the particular business and to determine whether the funds for which application has been made will be applied productively if the loan is granted.

The second difficulty with which the bank is confronted is the judicious use of the money after the loan has been made. It is impossible for the bank to exercise direct control over the disposition of the funds and it is necessary for the banker to rely largely upon the reputation of the company and its officers. The banker in granting the loan assumes that the use to which the funds will be put will produce returns at least sufficient to pay the interest requirements and that the principal will be available to retire a portion of the principal of the loan at maturity. In instances where the borrower applies the funds to unproductive purposes the bank has indirectly become a party to what might be considered unsound financial practices, but no adequate method has been devised to entirely prevent this situation. If the bank learns of activities of this type, it is always in a position to withhold further loans but so far as the loan which is specifically mis-applied is concerned, it is usually powerless to act. Accepted banking and financial practice dictates that there are certain purposes for which capital obtained for short-term notes may be properly used:

1. To produce, ship, store, sell and to collect payment for the regular product of the business, when there is reasonable certainty of turning the transaction in time to pay the loan.
2. For current or capital expenditures pending the receipt of funds from the sale of stock or bonds which have been underwritten and the proceeds of which are expected in time to liquidate temporary loans.
3. To carry unusual stocks, production, or accounts receivable which will ordinarily be liquidated in time to repay the loan or amply to secure its partial renewal.
4. To pay dividends which have been earned but are temporarily locked up in assets that will be normally liquidated in time to repay the loan.¹

¹W. H. Walker, "Corporation Finance," page 87.

126. Bank collateral

Collateral loans are sometimes arranged with the bank in instances where the general credit of the customer is not sufficient to cover the amount of the loan granted. This does not necessarily mean that the customer's credit is not good but for an excess over a determined level the bank may require some specific security. Collateral loans are those wherein the borrower places with the bank some specific property or evidence of ownership of property as a guarantee of his ability to pay the loan when it comes due. If the collateral is found acceptable to the bank, it is held by it until the loan has been fully repaid. In case the borrower cannot fulfill his obligation and the bank has exhausted all other legal means of collection, it may seize the security and convert it into cash in order to indemnify the bank against loss. Collateral security is generally of three types:

1. Stocks and bonds
2. Merchandise
3. Notes and accounts payable

From the point of view of the banker the best security that can be offered is the stocks and bonds of a sound corporation. There is usually an established market for securities of this type and they can be converted readily into cash in case the necessity for this action should arise. Consideration is also given to the fact that the borrower who posts stocks and bonds is using part of an outside surplus and would not wish to lose assets of this type, except as a last resort.

Merchandise comes next to stocks and bonds as acceptable collateral. This is particularly true if the materials accepted are not of a highly specialized character

so that it would be possible to liquidate them if such action were found necessary. As compared with stocks and bonds, there is the disadvantage in accepting merchandise that a change in the market often makes it difficult to dispose of goods. It forces the bank to consider this extra qualification in determining whether it is a reliable asset.

The third class and least desirable of those enumerated includes notes and accounts receivable. It is necessary to distinguish between certain types of securities under this heading because action on the part of those involved in the sale and purchase of the merchandise may make the security more acceptable. If the prospective borrower is well known as a customer of the bank and has endorsed the note of another individual or firm, the risk is greatly reduced. With this added endorsement the note becomes what is known as a two-name paper.

If the notes represent nothing more than the promise of an individual or company to pay, the bank will have to investigate very carefully. An unendorsed note is really very little better than a plain account receivable for use as collateral. In determining the value of this type of security the bank has to exercise a great deal of judgment concerning the company's standing and its capacity for earning.

127. Factors considered by bank in granting loan

Before extending credit to an individual or corporation it is necessary for a bank to consider many factors. There are four points of desirability which a banking institution will particularly seek. These are as follows:

1. That it is a short-time loan.
2. That the funds secured will be properly used.
3. That the financial condition of the business is such as to warrant a loan.
4. That the collateral is of the proper grade if the loan is secured by collateral.

Under the commercial banking system that has grown up in the United States the chief business of the banking house consists of receiving deposits and of discounting notes and acceptances on a short-time basis. If a commercial bank is to properly fulfill its function in the business community, it will be necessary to keep a high percentage of its resources in a liquid condition. It is this particular characteristic which should distinguish a commercial bank from a savings bank. The commercial bank in order to survive must be in a position to assist business houses with short-time loans.

Bank's responsibility for loans—Standing as it does as the chief source for the distribution of working capital, the bank finds it necessary to examine carefully every effort to secure funds for this purpose. In recent years the care which banks have shown over the use of the loaned funds has grown out of the unfavorable experience encountered in earlier banking history when a lenient policy toward granting the customer's request was too frequently adopted.

After a bank has determined that the length of a loan falls within the scope of its normal operations, its next problem centers about the financial condition of the business. The main question involved here is the ability of the company to meet the principal payment on the date of maturity, and in many instances a careful examination of the balance sheet will indicate that this is improbable. There are a variety of reasons why this may

be true. It may be that the current liabilities are not sufficiently offset by current assets, or that the surplus has not been applied to the development of the business, or that current liabilities are being incurred to meet fixed charges. The bank will not feel that it is justified in extending credit under these conditions and will not grant a loan until the company has altered its operations to take care of these unsound practices.

The bank must examine the type of collateral and its quality in all cases where it is found necessary to demand this type of security. The primary consideration involves the question of whether it is sufficient and strong enough to indemnify the bank in case of failure of payment on the part of the borrowing company.

In recent years the banks have been interested in securing commercial paper that could be rediscounted. This has been the result of the policy of the Federal Reserve to extend credit through its rediscounting operations. Because of the direct interest of the Federal Reserve in this operation it has indicated the type of paper which it deems satisfactory for rediscount. It is described as follows:

The limitations relating to rediscount operations, contained in section 13 of the Act, may be divided into two classes: first, those positive limitations under which such notes, drafts, and bills of exchange may be accepted for rediscount; and, second, those limitations specifically stating what paper shall be excluded.

If we begin with the latter, we find the very clear provision excluding all notes, drafts, and bills of exchange which are "issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities (except bonds and notes of the Government of the United States)." This clause does not require comment.

In order to be eligible for rediscount, bills must "arise out of actual commercial transactions," and "the proceeds must have been used or they are to be used for agricultural, industrial, or commercial purposes."

In like manner "notes, drafts, and bills of exchange secured by staple agricultural products or other goods, wares, or merchandise" are eligible for rediscount provided they arise out of "actual commercial transactions" covering some particular stage in the process of production and distribution. They are not eligible when drawn to cover merely speculative investments.

Maturities are generally limited to ninety days. But "in exceptional circumstances, when . . . an established industrial or commercial business . . . is unable to obtain requisite financial assistance on a reasonable basis from the usual sources, the Federal Reserve bank . . . may make loans to, or purchase obligations of, such business . . . on a reasonable and sound basis, for the purpose of providing it with working capital, but no obligation shall be acquired . . . with a maturity exceeding five years . . . Each Federal Reserve bank shall also have power to discount for, or purchase from, any bank . . . or other financing institution operating in its district, obligations having maturities not exceeding five years, entered into for the purpose of obtaining working capital for any such established industrial or commercial business and to make loans or advances direct to any such financing institution on the security of such obligations"¹

The banks are interested in having the borrower leave a certain portion of the loan with them on deposit. This is to assure the bank that the funds would be used cautiously and conservatively, and also to give the bank a reserve with which to carry on its operations.

There is another caution which many banks employ that involves an annual check-up on the affairs of the borrowing company. This may be exercised either by requiring the company to pay all of its obligations to the bank at least once each year or it may involve the submission by the borrowing company of an annual accounting showing the condition of the business. Either of these permit the bank to exercise some control over the firm whose funds the bank is helping to supply.

Accountants show need for financial statement—It is interesting to examine the development of

¹Federal Reserve Bulletin, July, 1934, page 430.

the use of financial statements in connection with the obtaining of short-term funds. The first agency to encourage the use of statements as a basis for estimating the strength of a prospective borrower was not the banks but the accountants. This feeling on the part of these financial investigators gained increasing favor with banks through a period of years, but it received a sudden impetus when the Federal Reserve Board began to place greater emphasis on the practice. Here again we have a demonstration of the developmental character of our economic system. The borrowers forced their viewpoint upon the banks for many years when they insisted that confidence was all that was necessary in the granting of loans under the merchandise discount procedure. It remained for a disinterested agency with no primary interest in the actual profits of either the bank or the business to urge the use of this valuable instrument for judging the financial status of a company and its earning qualities.

128. Extent of credit company can properly use

Specific consideration has been given to bank credit as well as to the various kinds of trade credit. In covering these classifications no reference has been made to the amount of credit which the company should properly use. It remains for the lending agency after it has determined that the company is a good credit risk to determine the extent to which credit should be granted. And this in turn depends entirely upon the advantageous use of funds by the borrowing company. It is impossible to set up a definite rule where transactions of this type are concerned because no two industries or no two companies within the same industry will operate in the same way and consequently their credit needs will differ. In this

instance it is again possible to make good use of the financial statement because the condition of the business will be the chief determinant of its use of credit regardless of the nature of the business itself.

A comparison between the short-term liabilities of a company and the liquid assets is a common method employed for judging the extent of bank or trade credit. At best this is only a rough guide and the exercise of considerable judgment is necessary before a final decision can be reached. In an earlier section a description was given of the means by which current liabilities could be used in the securing of capital. Consideration must also be given to the cash item to insure an amount sufficient to take care of customary current expenses and also to meet trade and bank credits as they mature. A particular current asset may be converted into cash earlier than another which is regarded as a fixed asset, but unless this conversion can take place within a reasonable length of time the asset cannot be considered liquid for the purpose under consideration. A bank may grant a loan on the basis of total current assets, but the obligation can be paid only in cash. Consequently, it is necessary for the borrowing company to maintain enough immediately convertible assets to provide for paying current obligations. The better credit reputation established by a firm through its ability to pay quickly leads to great interest in maintaining the proper relationship between current assets and current liabilities.

Ratio of current assets to current liabilities—

The variations encountered in different types of business enterprise make it impossible to establish an arbitrary ratio between current assets and current liabilities. Banks are inclined to prefer situations wherein current liabilities

are not more than 50 per cent of current assets and in almost no line of business is it wise for the current liabilities to exceed 75 per cent of current assets.

None of the funds obtained by trade credit should be used for permanent investment because this use of current funds will mean that too much time will elapse before funds are again available for repayment. The probable result will be that the borrower will find himself faced with the necessity either of issuing long-term obligations or of waiting for the profits of the business to accumulate. If a corporation functions in this manner and relies upon the sale of stocks or bonds, it involves the question of dependence upon a speculative return. No matter how stable and reliable the financial condition of a company might be, a bank would not consider the foregoing operation as a satisfactory basis for granting credit. No business earns profits quickly enough to pay off the immediate obligations incurred through the use of bank and trade credit and to depend upon the accumulation of profits in this connection is not sound financial practice.

Chapter XIII

Investment Securities and Credit Instruments

129. Need for written forms

In the preceding chapters a discussion has been carried on covering in detail stocks, bonds, and notes that are sold to the public, notes that are issued to banks, and notes issued to merchandise creditors in payment of accounts due. Particular attention has been given to the method by which merchandise and services are obtained on account, with payment deferred until a later date. In considering the methods of obtaining business capital it was pointed out that the latter transaction involved an acquisition of assets that could be utilized in the operation of the business.

As each individual method for obtaining funds developed, there grew up with it standardized forms or instruments which were used as evidence of the indebtedness as well as of the transaction involved. Various minor changes were made from time to time and many of these were tested in the courts until today there are accepted forms for each operation. In the succeeding paragraphs these forms will be described and illustrations will be given to clarify their use.

130. The certificate of stock

It has already been observed that a majority of the capital under which corporate business operates is obtained through the sale of stock. When the stock is sold to the public each purchaser receives a certificate

indicating the extent of his particular interest in the assets of the company. Confusion has risen in the minds of many persons concerning the value of stock, and it should be borne in mind that the certificate as such has no value but is only an evidence of the proportionate ownership of the individual whose name appears thereon. For purposes of convenience the stock of the corporation is divided into shares and a certificate may represent any number of shares depending upon the holdings of the individual. The owner's equity may be represented by several certificates as a matter of convenience but these have no greater value than if his entire holdings are represented by a single certificate. Nearly all stock certificates contain much standard phraseology which is supplemented by specific provisions to cover the particular issue with which the instrument deals. The student should consult any local banker if he is not familiar with the forms which stock certificates take and ask permission to examine a certificate and have its provisions explained in detail. If the opportunity thus presents itself to examine original certificates, it is also advisable to compare those which represent common stock issues with those which represent preferred stock. The student will recognize at once many of the provisions that have previously been discussed.

131. The bond

The second classification of importance measured by the amount of capital raised thereby is the bond. It has been explained that a bond is a written promise on the part of the corporation to pay a specified amount at a certain future time with a stated rate of interest to be paid at definite periods between the time of issuance and

the date of redemption. As in the case of the stock certificate, the bond has developed through frequent use and revision into a fairly standardized form. It is more formal than a note and is usually executed under seal. When the student visits his banker in order to examine instruments of various types here discussed, he should also compare the bond with the stock certificates referred to in the preceding paragraph.


132. The promissory note

A promissory note is the instrument given by a borrower in return for a loan. The amount to be repaid consists of the stated amount of the loan plus the interest, or the stated amount may include the interest if the note is discounted in advance. It represents merely an unconditional written promise to pay the designated amount at a definite future time and in its simplest form is signed only by the person agreeing to make the payment¹.

In the drawing of a note the two persons immediately concerned are known as the "maker," the person who signs the note, and the "payee," the person or institution in whose favor the note is drawn. The note is formal evidence of indebtedness on the part of the maker to the payee.

Notes are also issued as evidence of indebtedness in those cases where a weak debtor is asked to cover the amount of his debt in this formal way and thus eliminate the possibility of further dispute. From a credit viewpoint the use of notes in the latter way is not regarded with favor. The form and content of a note is illustrated on the next page.

¹Hoaglund: *Corporation Finance*, page 197, et seq.

	Cincinnati, Ohio, July 8, 19	
	Thirty days after date. I promise to pay to	
	the order of J. N. Kincaid	
	Eighty-five and 00/100 Dollars	
at Fifth Third National Bank of Cincinnati		
Value received		
No. 87	Due Aug 7, 19	J. R. Hydel

133. The draft

A draft involves three individuals or corporations and these are known as the drawer, the drawee, and the payee. The instrument itself is a written order on the part of one person directing a second to pay a specified amount to a third.

\$350.00	Philadelphia, Pa., Sept 10, 19
At Sight	
Pay to the Order of	W. R. Miller
Three hundred fifty and 00/100 Dollars	
Value Received and Charge to Account of	
To	R. A. Reed
H. A. Griffin	
No. 180	New York City

The person whose signature appears in the lower right-hand corner of the draft and who is responsible for drawing the instrument is known as the "drawer." The bank or individual on whom the draft is drawn is known as the "drawee." The payee is the person or individual designated to receive the payment as ordered¹.

¹Kester, "Accounting Theory and Practice," page 77 et seq.

There are two main classifications of drafts, those which are drawn on a bank and commercial drafts.

Bank sight drafts—A bank draft involves transactions wherein a bank has funds on deposit in a second bank. Its purpose is to take care of the business of the customers of the first bank who wish to obtain funds from the second bank and utilize their deposits or other connections in order to do so. For example, an individual in Chicago may wish to pay \$1,000 to another person in

\$500 ⁰⁰ ...	No 684
FIRST NATIONAL BANK	
NEWARK, NEW JERSEY. <i>Sept. 22, 19</i>	
Pay to the Order of <i>W. H. Woodward</i>	
<i>Five hundred and no</i>	Dollars
SECOND EXCHANGE BANK NEW YORK CITY	<i>J. A. Kilbourn</i> Cashier

New York. He may purchase from his own bank in Chicago a draft on some New York bank where his Chicago bank carries an account. He will order this draft made payable to the individual in New York whom he wishes to receive the \$1,000. He then has the \$1,000 charged to his own account or if he does not have an account of that size he pays the bank \$1,000 plus a nominal charge for the services rendered and receives in return his draft. This he forwards to the individual in New York who presents it for payment to the bank upon which it is drawn or to his own bank for collection by transfer. The form of bank draft is shown above.

There was a time when bank drafts were used in great volume, but in recent years they have declined in

importance and have been replaced by the check. One reason for this is the increasing amount of information concerning the credit standing of companies that has become available to business firms. The availability of this information in all parts of the country has reduced the risk so greatly that the bank check has become a more convenient medium.

Commercial sight draft—There is a similarity between the bank draft and the commercial sight draft. The difference is that in the use of the latter the transaction is carried on between individuals or business firms. The commercial sight draft is the order of one individual to another directing him to pay a certain amount of money to a third person designated thereon. In form it may be as follows:

\$200 ⁰⁰ ..	St. Louis, Mo., June 4, 19
<u>At Sight</u>	
pay to the Order of	<u>Ourselves</u>
	<u>Two hundred and no</u> Dollars
Value Received and Charge to Account of	<u>Brown & Smith</u>
To	<u>J. O. Langhans</u>
No. 257.	<u>Kansas City, Mo.</u>

In the past the commercial sight draft between three persons has been used extensively as a convenience wherein two debts could be settled by a single operation. In recent years it has almost passed out of existence and is presented here only as a connecting link in the development of these instruments.

There is another commercial draft which is still used in some lines of business. In this type the first party

directs the second party to pay a specified sum of money to the first party.

This draft is utilized for the collection of accounts which are due or about to be due to the first party. In handling these transactions it is also sometimes the practice to have the draft drawn so that it is payable to the bank of the first party and collection is made through this agency. The procedure of collection is approximately the same in either case, except that where the individual draws a draft in favor of himself the draft is deposited with the bank for collection whereas the operation is slightly simplified by having the draft payable directly to the bank.

Time drafts—Drafts are classified according to time either as sight drafts or time drafts. In the drafts referred to above reference has been made entirely to

\$ <u>500.00</u>	San Francisco, Calif. <u>June 6, 19</u>
<u>Twenty</u> Days after Date	Pay to the Order of
<u>First National Bank, Chicago</u>	
<u>Three hundred and no</u>	Dollars
Value Received and Charge to Account of	
To <u>W. B. Jones</u>	<u>King & Logan</u>
No. <u>68</u>	<u>Chicago, Ill.</u>

sight drafts which mean that they are payable "at sight" or as soon as they are presented for payment. A time draft is one in which payment is designated at a certain number of days after the date on which the draft is drawn. A draft becomes an acceptance if it is acknowledged by the individual against whom it is drawn by his writing across the face the word "accepted" and

adding his signature. This acceptance makes the draft a formal promise to make payment of the amount stipulated on the specified date. The acceptance of a draft alters its character in such a way that it *in effect* becomes a note and for accounting purposes is treated as such. The distinction should be observed however that the maker writes the note whereas the payee writes the draft. Attention has been called to the difference between the three persons involved in the draft and now we encounter a fourth classification sometimes known as the "acceptor." This is the individual or bank which accepts the draft and signifies its acceptance on the face of the instrument.

134. The trade acceptance

There has been a constantly increasing use during recent years of a type of draft which is known as a trade acceptance. This instrument is defined by the Federal Reserve Board as a "bill of exchange drawn by the seller on the purchaser of goods sold and accepted by such purchaser." The trade acceptance is really a specialized form of the acceptance by draft referred to in the preceding paragraph and its distinction arises through the type of transaction involved and an inclusion of a description of this transaction on the face of the draft. This description usually reads as follows: "the obligation of the acceptor hereof arises out of the purchase of goods from the drawer. The drawer may accept this bill payable at any bank, banker, or trust company in the United States which he may designate."

If a firm in Minneapolis sells merchandise to another firm in St. Louis and the former has arranged that the terms will be net thirty days, it may have the firm re-

ceiving the goods agree to accept a thirty-day draft. In this event the Minneapolis firm will draw such a draft using the regular trade acceptance form and present it to the company in St. Louis for acceptance. After it has been formally accepted it will be returned to the drawer in Minneapolis who will probably present it for discount at its own bank. In this manner the capital is released at once. The Minneapolis firm would have otherwise been forced to use it in the transaction for thirty days. The bank will credit the Minneapolis firm with the face amount of the acceptance less the cost of discounting and upon the date of maturity will send the acceptance to a correspondent bank in St. Louis for collection. If the Minneapolis firm has decided to hold the acceptance for thirty days, it will present it to its own bank for collection in the same manner at the expiration of the specified time.

135. The check

A check is merely a specialized form of sight draft. In its use the depositor draws upon the bank wherein he has his account. Through the development of various credit instruments both individuals and corporations have arrived at the use of the check as the commonest form for facilitating the transfer of funds in business operations. It is in such general use today in the United States that almost everyone is familiar with the method of employment.

There is a specialized form of check which is known as the "cashier's check." This is used to make payments by persons who are not depositors of a bank, or it may be used by the bank for the payment of its own obligations. It differs from the ordinary check only in that it is drawn on the bank and signed by the cashier of the bank.

136. Miscellaneous forms

In discussing the various instruments and forms in this chapter, the simplest description has been employed so that only an elementary knowledge of finance will be necessary in order to obtain an understanding of their function. All of the usual instruments have been dealt with, but the individual student may encounter in banking operations many highly specialized and unusual forms. If the student is interested in financial work, it is recommended that he make a detailed and intensive study of all types of negotiable instruments and commercial forms so that he may acquire a complete technical knowledge of them.

4. Methods and Devices for Securing Capital

Chapter XIV

Promotion as an Aid in Acquiring Capital

137. Need for promotion

In the preceding chapters, it has been emphasized that in the formulation of the financial program two things are necessary:

1. It is necessary to estimate the amount of each kind of capital funds required in the operation of the business.
2. It is necessary to decide as to the source from which this capital is to be obtained or the kind of obligation which the business is to incur in order to secure it.

The next step is to put the financial plan into execution, that is, to obtain the required amount of capital. It has been explained that capital may be secured by issuing stock, bonds, or long-term notes, or by contracting current liabilities. The capital secured by means of current liabilities is obtained, in the main, during the process of the everyday business operations. The method of securing it need not concern us at the present time. The capital secured by means of stocks, bonds, and long-term notes is obtained as a result of the sale of these securities. It is the purpose of the present and the following chapters to discuss the process by which these securities are sold and the required capital obtained.

Procedure for securing capital—In the case of the sole proprietorship, the partnership, and the small corporation, it may be possible to meet the requirements for capital from contributions by the parties who are

responsible for the organization of the business. When a large corporation is organized, however, it is usually necessary to obtain funds from others than those who are responsible for its organization. In order to obtain these funds, it is necessary that those from whom they are to be secured should be interested in the proposed business; and in order to secure their interest and their investment, it is necessary that someone should present to them such information with reference to the new organization as will convince them of the desirability of investing in it.

This is true not only in the case of an entirely new organization, but also in the case of a consolidation of existing companies. It is true in the event of the expansion of any company, if the expansion necessitates the securing of funds in any large amount from men outside the business and who are not familiar with its operations and condition. Someone must formulate the plans, must collect the data which will serve as the basis of action on the part of those whose interest it is desired to enlist, and then must sell the proposition. The one who performs this function is known as a promoter.

What constitutes a promoter—The term “promoter” is used in a somewhat broader sense in this discussion than that in which it is ordinarily used by writers on finance. It is not taken to mean only the so-called “professional promoter” who spends all of his time in organizing new companies or in consolidating old ones. It is doubtful whether very many such individuals exist. The attitude taken in this discussion is rather that, in the securing of funds for the organization, or for the expansion of a business, it is necessary that certain plans be formulated; that certain data be collected; and that a

sales campaign, either great or small, be executed. The accomplishment of these tasks in the process of securing funds for use in a business may be termed "promotion"; and the person, or organization, who carries on such work may be termed a "promoter." In some cases bankers may perform this function, in other cases legal advisors or other professional men may do it; but this discussion is concerned in the process itself rather than in the persons who are responsible for its execution. As a matter of convenience, however, reference will be made quite frequently to the promoter, meaning thereby the one who performs the promoting function.

138. The function of the promoter

The promoter may perform a very useful function in the planning and executing of a program for securing capital. Although we usually think of a promoter only in connection with the organization or re-organization of a business, the work of the promoter may be useful at other stages in a business program. The promoter's function is to analyze a proposition, to formulate a plan, to assemble the data necessary to serve as a basis for the plan, and then to put the plan into execution. All these functions must be performed, and a person or an organization capable of performing them renders a useful service and is entitled to proper compensation therefor.

It is unfortunate that many of those engaged in such work in the past have carried on their work in such a way as to bring the term "promoter" into bad repute. This is due principally to the fact that parties having such work in charge have tried to make enormous and, oftentimes, secret profits from their work. They have not been content to render a professional service and to

receive a reasonable fee therefor. From a legal viewpoint, the promoter is not entitled to secret profits, and, from a professional viewpoint, he should not obtain them.

The remuneration that a promoter does receive is often in the form of stock in the company which he is promoting. If the business becomes successful, the promoter receives dividends on his stock; if it fails, he gets nothing. If the corporation prospers, the value of the stock increases, but if it is unprofitable the value of his holdings declines to low levels. If it fails, the stock becomes practically worthless. Therefore, likelihood of enormous profits are more than offset by the probability that he may eventually receive little or nothing for all his effort.

The relationship between the promoter and the company he is seeking to establish is unique in character. Since the company he is organizing has no legal status, he cannot be an agent of it. Yet what he does on behalf of the concern partakes of agency because the board of directors may ratify his acts once the firm becomes a legal entity. Perhaps the most that can be said concerning this peculiar relationship is that it is one of trust and that the promoter acts for the potential corporation in a fiduciary capacity. Such being the case, he must make full disclosure of every act done on behalf of the company and must not enter into secret agreements with others whereby he might profit at the expense of the company. Any profit made during the course of formation of the concern must be accounted for by him to the board of directors.

A promoter is not obligated to bring every business venture begun to completion. In the absence of an agreement with others interested in the same venture, he is free to abandon the proposition at any time he may see fit. This abandonment may result from lack of sufficient funds to complete organization, and to put the company on

a "going concern" basis after organization. Or it may result from the fact that changing competitive and economic conditions clearly indicate that the venture although originally sound is now without merit, and the company could never hope to establish itself on a profitable basis. When a promoter abandons a venture, he loses the money which he has put into it during the organization period, to say nothing of his time and effort.

139. Kinds of securities handled by promoters

The securities handled by promoters, using that term in the broad sense, may be classified as follows:

1. Those issued by speculative enterprises in which the unknown quantities cannot be determined with accuracy and in which the risk is relatively large. These include:
 - a. Securities which are fraudulent
 - b. Securities issued by corporations engaged in untried lines of industry
 - c. Securities offered by new corporations in staple lines of industry
 - d. Securities which are essentially speculative in their nature and which involve a high degree of riskSecurities of this class usually have to do with mines, oil wells, and inventions
2. Those issued by non-speculative enterprises in which the uncertain qualities are so far eliminated that the risk is no greater than that encountered in ordinary business undertakings. These include:
 - a. Securities whose inherent qualities ensure their sale and disposition without fraud
 - b. Securities where the parties to the sale are such that their disposition without fraud is assuredSecurities of this class are those issued for railroads, public utilities, high-grade industrial corporations, and federal, state, city, county, township, and other governmental bodies.

The promotion of the first class of securities is sometimes termed "low-grade promotion," and that of the second class is termed "high-grade promotion." It is, of

course, impossible to draw an arbitrary line between the two. Some of the securities mentioned under the first class are frequently handled by high-grade promoters.

140. Low-grade promotion

The promotion of low-grade, highly speculative securities is usually carried on by an organization established for the specific purpose of financing the particular company in question. In such cases, the appeal is usually through the mail to investors of limited means. The literature employed in advertising is quite extravagant in its praise of the business which is being promoted and various devices are used to persuade the investor to purchase.

There are certain well-defined marks which indicate a promotion of doubtful character. One who has received much literature of this kind soon learns to detect the familiar style and the sales devices employed.

It is not deemed worth while to discuss further the question of low-grade promotion; for such promotion is not governed by principles either of finance or of management. It is necessary for a person to learn early, however, that in the management of his own finances, he needs to refrain from investing any of his funds in such businesses. Fortunately the Federal Government is eliminating some of the fraudulent schemes of this kind by prosecutions for improper use of the mails.

141. High-grade promotion

By high-grade securities is not meant only those to which no risks are attached, for, in the majority of bonds and stock sold on the market, there is a considerable element of risk. Rather, by high-grade securities is meant the securities of firms which the promoters believe,

and have reason to believe, will be successful. Such securities are now usually sold through investment bankers.

The investment banker, as we know him today, is of comparatively recent origin. During the first seventy years of the history of the United States, investment banking was unknown; business enterprises were promoted either by individuals or by partners who supplied the necessary capital themselves or secured it from their friends. Most of the early government securities were sold to banks or directly to individuals. Later, when both national and state governments put out large issues, it became necessary to enlist the aid of the banks in order to sell the securities to the public. In order to facilitate this operation, separate organizations were formed to handle the securities. The issue of government securities was, however, intermittent, and the sales organizations found it convenient to handle industrial securities as well, so as to have a more constant business; and, in time, the selling of industrial securities became the principal part of their business.

The work of the investment banker will be referred to more especially in Chapter XVI. Here it is desired only to emphasize that the investment banker has become the chief promoter of high-grade securities.

142. Analysis of the promoter's task

A promoter, in the case of a new corporation, sets in motion the machinery which creates the corporation. In the case of the sale of additional stock, he directs the sales campaign. His work, in both cases, is quite similar. In the following discussion we shall deal particularly with the work of the promoter in connection with the organi-

zation of new corporations. The process which the promoter carries on is divisible into three distinct phases:

1. He must investigate the undertaking to ascertain whether he is justified in assuming the obligations involved. In this manner the investment banker always investigates the financial condition of a business before he agrees to handle its securities.
2. He must "assemble" the proposition, or get it under his control.
3. He must sell the securities so as to finance the proposition.

143. Investigating the proposition

The investigation of an enterprise involves a consideration of all the possibilities of the undertaking and of all the conditions that pertain to the development of these possibilities. Sometimes a proposition must be "found," as in the case of a new invention which has come to the attention of the promoter. He must examine carefully all the features which make for the success or failure of the patent. The invention may not be patented at all, and, if not, he must see that it is given protective rights. If it is patented, he must be sure that it is sufficiently different from other inventions to offer a lucrative field for development.

Sometimes, the promoter is called upon to investigate a highly speculative enterprise, such as a mine or an oil well. Many investment houses refuse to handle the securities of such companies until they have an established reputation and have proved their reliability. If the promoter does undertake the promotion of such a business, the problem of investigation becomes an arduous task. There are so many unknown factors that it is quite difficult for him to determine the prospects of

such a business. Yet he is risking his professional reputation if he enters into such a proposition without assurance of its reliability.

The cases just cited are examples of the more difficult tasks of the promoter, but in any case the investigation must be thorough and must include the following:

1. A consideration of the possibilities upon which the undertaking is based. Is the proposition substantial and will it do all that is claimed for it? If there are like undertakings in adjacent localities, it is frequently possible to make comparisons as an aid to determining the chances of success.
2. Is the title secure? The title may involve such questions as the reliability of a deed or a patent, as remarked above, or bills of sale. Defective titles in respect to lands and mines are not uncommon, and frequently it becomes necessary to undergo considerable expense in order to remedy them.
3. Will the goods produced be satisfactory? It goes without saying that there will have to be a demand on the part of consumers in order that satisfactory results may be obtained. If a demand is not already created, then the promoter must consider this factor in his investigation. He must reckon the additional sums necessary in order to carry on an extensive advertising campaign to the end that a potential demand may be created. The output of goods must be great enough to meet the demand and, in addition, it must be equal in grade to the competitive lines already on the market, unless, by chance, there is a demand for a lower grade. Further, the output must be such that it will pay the concern to undertake its production.
4. Is the concern which is being promoted well located? In this connection, provision must be made for adequate transportation, water, and fuel; the required raw material must be available; and the question of supplying the necessary labor must be solved.
5. How is competition to be met? It sometimes happens that an enterprise does not meet with competition, but this is an exception, and it is more often necessary to measure the strength of the competing forces and to take into account their activities in advance.

144. Assembling the proposition

Assembling has to do with getting the proposition under the control of the promoter. The promoter may consider himself in control as soon as he has obtained jurisdiction over a whole plant, or over a major part of it, or over a very essential portion of the enterprise. The important factor is that he have the situation well in hand and that he be in an advantageous position for directing operations.

If the promoter is handling a new enterprise which has to do with an invention, he carries on his function of assembling by obtaining an option on the invention, or by agreeing with the inventor upon some other contractual basis. In the case of oil or mining lands, he must secure an option on the property. The promoter has a more difficult task if he is engaged in consolidating concerns. In this case, he must secure options on property or arrange for the purchase of one or more plants. This may require considerable time and money, because it may be necessary to secure the consent of all who are interested in the respective ventures before consolidation can take place.

The best and most satisfactory method by which a promoter may gain control of his proposition is by the use of contracts. In the case of a consolidation, he must see to it that the owners of the property do not anticipate his efforts and go ahead and carry on the work without him.

The promoter is not in the position of a business man or a banker, but rather in that of an outsider who is attempting to gain the largest financial remuneration for his efforts. He must, of course, look after his own interests, and he can do this best by contracts covering each step of the procedure.

145. Financing the proposition

The third phase of the activities of a promoter has to do with the selling of the securities or the financing of the proposition. At this point, we shall consider only the financing necessary at the commencement of the promoter's task. The promoter ought first to further his undertaking as far as possible with his own funds; but, if he does not have sufficient money available, he can usually go to his friends for assistance. Failing in this, he must resort to outsiders, and, before he can gain their interest, he will have to show that his proposition has value.

If his efforts are concentrated upon a piece of machinery, a model will have to be demonstrated, or else the full-sized machine must be shown in operation. To create interest in an oil undertaking, the promoter ought to exert his utmost efforts to show, by the actual construction of wells, that the property really produces oil. Sometimes he is able to obtain the co-operation of capital by showing that property in the immediate vicinity obtains abundant returns.

Soliciting aid—It is best for the promoter to center his efforts upon persons or enterprises that make a specialty of investing in undertakings similar to the one in hand or who are accustomed to loan money for such enterprises. Once he has gained the confidence of bankers, he may get their assistance either as individuals or as members of syndicates through which to borrow the funds required for securing options upon, or to make purchases of, necessary properties. The bankers may agree to assist him only in his promotion activities and may require that repayments be made just as soon as the proposition is successfully floated.

In some cases, successful promotion requires a great deal of construction work for which funds cannot be immediately gotten by the sale of securities to the public. Take, for instance, a mine, the development of which requires that a large sum of money be spent for buildings and for machinery. The promoter may be able to raise the entire sum needed before he commences structural work on the undertaking and may expend the money as required, but usually he has to secure funds for construction at the same time that he is undertaking the sale of securities.

One plan which the promoter may follow is to place mortgages upon the property and to issue bonds according to the scope of the mortgages. These may be deposited with reputable bankers as security for loans.

The promoter should not only secure his funds from the best sources, but he should be absolutely sure that he will get his money at the opportune time. If construction is undertaken at once and pushed forward with swiftness, in order to make a favorable impression, the promoter may find himself suddenly out of funds and, unless careful provision is made, will be able to secure additional funds only upon decidedly disadvantageous terms. A corporation may be capitalized for larger amounts than are actually needed, so that if some unforeseen contingency arises, there will be unused securities upon which to draw. A promoter should provide himself with all the funds that he is likely to need, and then he will not find himself obstructed in the midst of the building, the installation, or the equipment of his enterprise.

Distribution of stock—In the distribution of stock, it may be better for the promoter to scatter it among a great

number of persons, each one taking a small number of shares. Then the power of each individual stockholder will be so little that he cannot place his opinions above those of the promoter whose judgment, in the majority of cases, is far superior. A large number of small subscribers is not only a great advantage to the promoter, but it is likely also to create a better impression for the corporation, which has need to resort to the large investor only in case its funds are in danger of sudden depletion.

It is well for the promoter to obtain a considerable portion of his funds in the locality in which he hopes to place his enterprise. To have sums of money supplied by persons in the immediate vicinity becomes a valuable asset when he attempts to present his proposition to the public.

Chapter XV

Underwriting as an Aid in Acquiring Capital

146. Purpose of underwriting

Underwriting is a method of ensuring the sale of corporate securities before any offer is made to the public. Most of the large issues of securities are marketed through the efforts of underwriters. An underwriting concern acts in the capacity of guarantor and ensures that securities shall be sold within a certain time. The underwriting is at a price far enough below the selling price to leave sufficient profit to reward the underwriting company for its service in handling the sales. The corporation issuing the securities is vitally interested only in obtaining funds and, ordinarily, cares little whether the securities are sold directly or through the instrumentality of an underwriting syndicate.

Origin of underwriting—The practice of underwriting is supposed to have had its origin during the seventeenth century in Lloyd's Coffee House in London where business was customarily transacted between the merchants and the shippers. The custom gradually arose of dividing the risks of shipments among a large number of merchants, each one agreeing to share his proportion of the loss or gain. The fact that the contract was subscribed to gave rise to the term "underwriting." The word has a double significance in that it refers to insurance against loss or failure, as well as to the division of risk among several, so that no one will suffer any great loss.

Underwriting transfers risks—The important part of underwriting is that it relieves the issuing corporation of all risks involved in the marketing of the securities. When a company is to be organized with stocks or bonds for sale or when a company already organized decides to issue additional stocks or bonds, it wants to have the securities offered in the best possible manner. It may be that the securities do not give promise of marketing well at that particular time; it may be that the issue cannot then be offered to the general public; it may require considerable time to market the full amount of the securities; it may be that the purchasers will not buy. The danger of failing to secure the desired funds is obviated by placing the sale of the securities in the hands of responsible parties who will assume these risks.

Syndicate operations—Anyone who underwrites the securities of a company or purchases them outright usually associates with him a number of other individuals or organizations and thus forms an underwriting or subscription syndicate. In an underwriting syndicate, the securities are offered for sale through bankers who act as agents for the underwriters. In a subscription syndicate, the subscribers (bankers) become the owners of the securities and retail them to their patrons.

The success of a corporation, in equipping itself to carry on its functions, depends to a large extent on its ability to raise funds. If the securities are to be offered to the public in a very short time, the corporation must bear in mind that its issue of stocks or bonds is subject to a widely fluctuating market and that sometimes sales are made readily and then again only after a very long time. Hence, the underwriter may agree to purchase only that portion of the securities which the public fails to buy

Or the underwriter may agree to accept the whole amount, advance the money to the corporation, and place the securities upon the market at whatever time it sees fit. The underwriter has come into existence to protect the corporation in the investment market.

In the discussion on promotion, the investigating, assembling, and financing of a business proposition were considered. In point of time, the function of underwriting immediately follows these and immediately precedes that of the distribution of the securities.

147. Advantages of underwriting

Underwriting is obviously of advantage to the persons or syndicates who engage in it, for:

1. It is the reason for their existence. If the underwriters are persons of discrimination, as they must be, they are able to consider carefully the condition of the corporation which seeks their assistance as well as the state of the market upon which the securities must be placed. The profits derived depend to a large extent upon the time and place and manner in which the stocks or bonds are offered for sale.
2. Each new undertaking that is successfully floated enlarges the field and scope of the activities of the underwriter and, consequently, extends its clientele. According as the proposition is well or poorly engineered, it reflects credit or discredit upon the syndicate.
3. The underwriters are able to derive a substantial profit from their undertaking and at the same time to divide the risks in such a manner that the chances of losing are greatly decreased.

Underwriting is of advantage to the corporation issuing the securities, for:

1. The corporation is assured that no matter what may be the condition of business or of the money market, and no matter how its securities may be accepted by the pub-

lic, its money will be forthcoming on the stipulated date; and whatever projects the corporation has in mind may be undertaken at once and rushed to their conclusion without delaying on account of uncertainty regarding the issue of securities. If the securities are not accepted by the public, the responsibility falls upon the underwriters.

2. The corporation is assured of obtaining the full amount of funds desired. It often happens that an amount less than that sought is of no use whatever in carrying out a contemplated improvement or extension. For instance, if certain funds are required to open up a new mine or to purchase options upon oil lands, these activities cannot be attempted if the entire amount of money needed is not available.
3. The corporation is enabled to take advantage of the underwriter's expert judgment. This judgment extends to the terms of exchange and to the price which should be placed upon a new security.
4. The corporation is able through the underwriter's selling force to reach an investing clientele. This is especially desirable where the corporation knows nothing about the details of selling securities.
5. A corporation not having the time and means by which securities could be marketed successfully and within a definite period of time, would often suffer materially if it were not able to avail itself of outside help. The underwriting arrangement enables the corporation to shift the responsibility.

Underwriting is not only of advantage to the underwriter and to the corporation whose securities are being marketed, but it is also of advantage to the purchasers of securities.

1. As remarked above, the purchaser of securities can rest assured that any reputable banking house will not attempt the underwriting of securities until it has determined by investigation of the various phases of the issue that it is justified in taking the risk. This investigation is done at considerable expense, and consequently the investor can well afford any additional price he may have to pay for the greater security.

2. It is of advantage to the buyer to know that his interests are similar to those of the bankers or underwriters. It is a reflection upon the underwriters, if the corporation whose securities it has underwritten does not accomplish the purposes for which it was organized or for which the underwriting was done. If the corporation fails, underwriters of reputable standing are usually not found wanting in their efforts to consider the interests of their clients.
3. A purchaser of securities can be sure that when an issue of securities is underwritten, the whole issue has been disposed of by the company. Should a corporation be able to dispose of only a part of its issue, it frequently happens that the returns realized are not expended for the purposes intended. In such a case the security is likely to be not of the best. The fact that the issue is underwritten places the purchaser in a more satisfactory position.

From the above, it may be seen that underwriting is to the advantage of all the parties concerned. It is frequently true that underwriters obtain large profits from the services they perform. Here too, as in promoting, isolated instances of graft and collusion have brought some discredit upon the business as a whole. Underwriting is certainly necessary where large amounts of securities are to be floated. Of course, small issues are often handled by direct sales by the issuing corporation to prospective buyers or to stockholders. Where no great risk is involved, this procedure is feasible.

148. Underwriting syndicates

An underwriting syndicate is a voluntary and temporary association of individuals or firms or corporations which is formed by a syndicate manager, usually a banking firm, for the purpose of guaranteeing the sale, or for the purchase of an issue of stocks or bonds. Such a syndicate distributes the risks among a number of different

dealers. It is true that the term "underwriting" is frequently used to apply to the relation between a corporation and, say, one banking house, but it is more properly employed to designate the relation between a corporation and the several banking houses which together agree to handle the corporation's securities and to divide the risks involved. It must be borne in mind, however, that the original contract is ordinarily made between one banking house and the corporation, and then the banking house later distributes the risks and profits proportionately among the other bankers who have agreed to participate in the association. These several banking houses united constitute the syndicate. Sometimes each bank takes only a definite portion of the securities.

Advantages of association—It would be natural to think that each house would be desirous of handling its own sale of securities independently of the activities of other bankers. We are inclined to believe that much hostility exists between various concerns which are carrying on like businesses. As a matter of fact, as in other lines of business, banking concerns have learned that just as much can be accomplished by co-operation as by competition.

Any one firm hesitates to guarantee the success of a large issue; for no matter how certain the success of an undertaking may appear, there is always some risk involved since the market is susceptible to all the vagaries of the political and economic world. By taking associates, an underwriter is enabled to distribute the risk.

There are then three important reasons why it is desirable for a banking house to join with other banking houses in forming an association for carrying on the sale of large issues:

1. As indicated above, it is safer to divide the risk among a number of banking concerns. A failure to sell a given issue of securities might have little effect upon the standing and reputation of an underwriting syndicate, while it might easily be of sufficient magnitude to ruin one concern. It is, therefore, not considered good banking for one institution to undertake the marketing of a large issue of securities.
2. Underwriting provides for a wide territorial distribution of securities. If a banking house in Chicago were considering the marketing of securities for the construction of an interurban road in Illinois, it might call upon concerns in St. Louis and Detroit to assist in carrying out the proposition.
3. The formation of a syndicate has an added advantage in that it permits the clients of the various banking houses to invest in a greater variety of securities. One banking concern would likely find it expedient to confine itself to one line of securities, while an organization of bankers could handle several kinds. In this way, it is possible for the bankers to offer greater satisfaction to prospective buyers.

Syndicate operations illustrated—To illustrate the activities of the underwriting syndicate by a concrete example, let us assume that Halsey, Stuart & Co., Inc. are considering handling an issue of \$25,000,000 of 5 per cent bonds. Let us assume further that this company does not care to handle the whole proposition and decides to organize a syndicate. Halsey, Stuart & Co., Inc. acts as an intermediary between the corporation which is issuing the securities and the banking houses which are invited to participate in the underwriting. As we have seen above, the obligations lie between the issuing corporation and Halsey, Stuart & Co., Inc., and the latter is entitled to a special compensation, since it undertakes the organization of the syndicate. Halsey, Stuart & Co., Inc. then decides to sell the bonds to the investing

public, say, at \$94, and agrees to pay the corporation \$91 for each \$100 bond. It will be readily seen from the above that had Halsey, Stuart & Co., Inc. undertaken the whole proposition by itself, it would have derived all the profits or suffered all the losses, and hence all the responsibility would have rested upon it. In other words, if it had handled the issue itself and sold the entire issue, it would have made \$3 on each bond. However, it organized a syndicate and it charged \$1 on each \$100 bond for acting as managers thereof.

The other members of the syndicate may agree to pay at \$91 for all the bonds not taken by the public at the rate of \$94. In this instance, if the bonds are all sold at \$94, the associate members, as compensation for their services, will receive \$2 on each \$100 bond sold, the remaining \$1 going to Halsey, Stuart & Co., Inc.

If the public does not purchase all of the bonds, then the underwriters will have to buy them at \$91 and will either sell at a lower figure or hold the securities until a more favorable time. The latter procedure might require considerable financial resources, depending upon the size of the issue.

As indicated above, there is a kind of mutual understanding among those concerns which are accustomed to participate in underwriting. We have noted that financial operations are not necessarily based on competition. When one banking house invites another to share in an underwriting enterprise, it is assumed that the other will return the favor just as soon as an opportunity offers. In this manner, then, in most financial districts, the concern directing operations merely notifies those with whom it is accustomed to deal as to the amount which they are expected to handle. Because of this arrangement, it is

of relatively little importance which banker directs the activities for the syndicate, because each participant understands the risk it is to assume and the profit it is to receive.

Underwriting courtesy—While an underwriting proposition is being investigated by one banking house, the others take no interest in it. Since competition is thus practically eliminated, it is frequently contended that this leaves a fertile field for monopoly. Financiers, however, maintain that competition in money matters of this kind leads only to reckless extravagance and to a total disregard of fundamental principles and that such conditions would ultimately affect the investing public by causing sudden fluctuations in money values. They contend that, according to the ethics of all professional life, an individual should entrust his interests to one person as long as he gives satisfaction and that that person should be free from interference by others engaged in a similar business or profession; and they contend also that the service of a banker is a professional service.

149. Methods of underwriting

The various methods pursued by underwriters in the marketing of securities, bearing in mind that some of the methods differ only in detail, may be enumerated as follows:

1. The securities are offered to the public by the company which issues them or by agents of that company. In this case the underwriter guarantees the sale of the securities. Occasionally underwriters advance money before the securities are offered to the public. Under this arrangement, the underwriters must pay an agreed price for the securities not taken by the public. The price at which the securities are to be offered to the pub-

lic is made a part of this agreement. If the public buy the securities, the underwriter is entitled to the difference between the stipulated price and the public price. By this method the underwriter is receiving compensation for his goodwill. However, if the public do not buy, the underwriter must purchase at the lower agreed price and depend upon the market for his profits.

2. The underwriters supply certain sums of money to the corporation at certain times. This amounts to the actual purchase of the securities. The underwriters then hold the securities until such time as they see fit to dispose of them.
Or the underwriters may take the securities *en bloc* at a fixed price and pay for them only when resold. Whenever the securities are disposed of, the funds are turned over to the corporation. Under this plan, no risk is assumed by the underwriter, and consequently his profit cannot be so large.
3. A banking house buys securities and forms a syndicate in order to dispose of them. In this instance, the original contractual obligations rest between the banking house and the corporation issuing the securities.
4. It occasionally happens that associations of banking houses act together and agree with the corporation regarding the disposition of securities. In this case, the transactions are not carried on through one banking house, as a rule, but by all interested, acting directly. Each banking house, then, receives its profit as an underwriter.
5. A form of procedure that differs somewhat from the above is one in which the securities are purchased and distributed among the members of the syndicate to be held for investment and not for resale. In conclusion, we must note that usually the most satisfactory method, both to the corporation and to the underwriter, is that which involves turning the securities over to the banks at a fixed price and allowing the banks to make sales as they see fit.
Banking houses confine themselves largely to the buying and selling of securities; and when they have full control of a security issue, they are able to utilize their experience and the service of their selling force to the greatest advantage.

150. Function of underwriting syndicates

Underwriting syndicates have to do with three kinds of organizations:

1. **The established corporation**, which may find itself in need of funds in order to carry on repairs or enlargements. Up to this point we have had in mind, to a large extent, the needs of established corporations, and it is sufficient to note that their chief concern has to do with the raising of funds to carry on current operations or contemplated increased operations.
2. **The reorganized corporation**, which must have additional cash to put its business upon a paying basis. It may be that the corporation is in a condition to issue shares which are fairly well secured and which may be favorable to prospective purchasers. Sometimes it occurs that only a part of a plant may have been paid for with the money obtained through the sale of stock. If such be the case, it is frequently possible to take the income which would naturally accrue to shareholders and to divert it to the payment of interest and principal on a new issue of securities. In such circumstances the underwriter renders a useful service in assisting the corporation to find a market for the necessary securities.
3. **The new corporation**, whose securities are always speculative in nature. In our treatment of promotion we dwelt upon the question of speculative securities. Here we shall enumerate some of the points which should concern an underwriter when he is dealing with a new corporation:
 - (a) The underwriter is assuming the obligations of a corporation which has no recognized standing
 - (b) The underwriter is handling securities which have doubtful value
 - (c) The underwriter is obligating himself to support the issue to its conclusion
 - (d) It is difficult to obtain credit on speculative stock and, consequently, the full responsibility falls upon the underwriter

The only way a syndicate can safely guard itself in marketing securities for a new corporation is to see to it

that it has control of the whole concern. Even by this procedure the risk is not eliminated, because the success of a new corporation is in no way assured.

151. Syndicate agreements

Syndicate agreements are either formal or informal. We have already noted the mutual understanding that frequently exists between large banking houses. Attention has been called to the fact that sometimes when a banking house undertakes to underwrite an issue of securities, it merely calls upon other concerns which are accustomed to exercise such functions and, without requesting them to participate, simply directs that they handle a certain portion of the issue. This is an extreme case of an informal agreement.

As a rule, however, especially in the case of the larger issues, a syndicate agreement, or contract, is drawn up and signed by the parties in interest. This is the formal agreement. The following provisions are usually found in underwriting agreements:

1. The subscriber agrees to meet the terms of its agreement as to the acceptance and payment for the securities, whenever the syndicate manager calls upon it to do so; and, in case of failure, that it may be held liable at law on the contractual obligation.
2. The syndicate manager is the sole manager of the undertaking and may make any arrangements or perform any functions which, in the manager's opinion, may be necessary.
3. Members may, at any time, withdraw securities at the subscription price.
4. The syndicate manager usually assigns to the syndicate members a percentage of the profits on the transaction.
5. The syndicate manager may be a regular member of the syndicate.

6. It is sometimes provided that a member of a syndicate may assign his responsibility to other members of the association. It is usual to provide, however, that such assignment cannot be made without the consent of the syndicate manager.
7. There is often a provision for the co-operation of the members for the borrowing of capital.
8. The syndicate manager limits his liability to good faith in attempting to carry out the purposes of the agreement

It will be noted from the above that the powers of the syndicate manager are extensive and that any concern which enters the combination must submit itself to the manager's absolute control. As can be seen from the consideration of a syndicate agreement, the manager may handle the securities on the market as he sees fit; he may change any of the contracts in a manner which he may deem expedient for the purposes of the association; or he may expend the association funds to satisfy the requirements of the organization.

Syndicates are always temporary associations and are dissolved as soon as their function is consummated. If, by chance, the organization is for a certain term, one of two procedures may be followed: The syndicate manager may extend the syndicate, or the syndicate may be dissolved. In case the syndicate is extended, the returns from sold securities are used for the payment of loans, and the unsold securities are distributed among the members of the organization. Syndicate organization is of frequent occurrence, and it is not unusual for one banking house to be at one time a member of several syndicates.

Chapter XVI

Selling Securities Through Dealers

152. The function of distribution

In Chapter XIV it was explained that, in case of the organization of a new corporation or the consolidation of existing corporations or the expansion of any particular corporation, it is necessary for someone to perform the function of analysis and investigation. In the organization of a new corporation or the consolidation of existing ones, this function is usually performed by the one who is promoting the organization or consolidation. In the case of the issuing of additional securities by an established corporation, this function may be performed by the investment banker who is to assume responsibility for the issue. In any case this function must be performed.

After the proper analysis and investigation have been made, it is necessary for someone to assume the risks and responsibility in connection with the selling of the securities to be issued. In some cases the promoter secures individuals or groups of individuals to assume this responsibility. In some cases the promoter assumes it, and in other cases it is assumed by the corporation itself. In the case of a large issue of securities this responsibility is assumed by the underwriters who, in turn, may distribute the responsibility by the organization of a syndicate.

After the security issue has been underwritten either by the promoter, the corporation, or the investment banker, it is then necessary for the securities to be dis-

tributed, that is, they may be disposed of by being transferred to the ultimate purchaser. It is obvious that the corporation must dispose of the securities in order to obtain funds; if the promoter receives them, he must dispose of them in order to realize his profits; and if the investment banker or syndicate takes securities, it is only to obtain a profit from their sale. Therefore, whoever underwrites an issue of securities must perform the function of a distributor.

153. Methods of distribution

As previously stated, all large stock issues are underwritten by the investment banker. The banker usually disposes of his securities through other bankers or dealers who, in turn, sell them to institutions and individuals. The corporation, when it undertakes to dispose of its securities, usually sells them directly to the final holder. The promoter, when he disposes of securities without the assistance of the underwriters, follows the same method as the corporation.

The problem of an underwriting syndicate carries through the complete distribution period. The corporation may feel less anxiety when the sale of its securities is underwritten and may therefore depend on the syndicate for distribution. The complete success of the campaign depends on an immediate distribution, following rapidly on the heels of the first advertising, or the market will become "stale." And, as discussed later in this chapter, the sales must be made to permanent investors, to avoid large repurchases by the syndicate.

Purchase syndicates—In case the syndicate wishes to exercise complete control over the distribution of the securities, it may purchase them outright—either from

the corporation or from the underwriting banker. This makes possible a quick profit through full control of the resale and the avoidance of some of the difficulties of distribution discussed elsewhere in this chapter.

Selling syndicates—For purposes of discussion, selling syndicates may be divided into three classes:

1. The limited liability or divided syndicate
2. The undivided syndicate
3. The selling group

The first type of syndicate combines the functions of underwriting and selling. The liability of each member is limited to the amount of his participation, and if he takes over this amount of securities he has no further liability. His underwriting commission is based on the amount of his original participation. His sales commissions are based on the actual amount of his sales, whether more or less than his original participation; but if sales are less than this amount, he must take over the unsold balance unless other members have sold more than their pro rata shares.

In the individual syndicate, each member must buy a pro rata share of the securities remaining unsold at the end of the syndicate period, regardless of the amount of his sales. His sales commissions are based on his actual sales, but he shares profits and losses on the basis of his original participation.

The selling group does not participate in the underwriting profits or losses, but only in the selling operations. Their responsibility is limited to the amount of their subscription; in case of oversubscription, they are liable only for the amount of their allotment. Their only profit is the difference between the price to the underwriting syndicate and their resale price to dealers or investors.

Syndicates of the first two types described may realize profits in several ways:

1. A fixed commission on sales up to the amount of pro rata participation
2. A higher commission on sales over this amount
3. A pro rata share of the net profit or loss from the whole organization

Under the Federal Securities Act of 1933, syndicate members must reveal the amount of their profits, through statement of prices paid, resale prices, commissions, etc.

It is quite general practice for syndicates to "maintain a market" for their securities during the distribution period. This is done by repurchasing enough securities during this period to absorb resales which might otherwise force down the market price. Such purchases are made at a loss, because commissions and profits have been included in the original selling price and must be covered in the repurchase price. The ratio of sales to repurchases must be high enough to show a net profit on the whole transaction.

To avoid losses from "maintaining the market," special price concessions are often given in return for the purchaser's promise that he will hold the securities through the distribution period. Frequently short-profit "chisellers" forget their promises, and resell their securities for a small profit; this may "break" the market and force the syndicate to make large purchases at a heavy loss. "Special-price" lots are therefore placed very carefully.

154. The security dealers

The dealers who assist in the distribution of securities to the ultimate purchaser may be divided roughly into three groups:

1. **Specialized investment dealers.** The aim of the specialty house is to trade with persons who have indicated a preference for the particular kind of securities in which it deals. As we see specialization in other businesses and professions, so it may be observed in the banking field. Along with large-scale production has gone large-scale investment. It now includes almost every kind of industrial security. Extensive investment has led to specialization, so that a house may now deal in municipal securities alone or in public utility securities or in the securities of industrial organizations. However, most firms, although they may specialize in certain kinds of securities, trade in any other kinds of securities in order to better satisfy their clients. Other concerns may trade in securities of a local nature but, in addition, assist large investment houses in handling securities of a national character.
2. **Small dealers.** These concerns do not undertake large propositions alone. Yet they are important factors in carrying out the functions of underwriters and in disposing of underwritten securities. The underwriters sell the small dealers blocks of securities and the small dealers peddle them out to their clientele.
3. **Large dealers.** The function of the large dealers consists mostly in underwriting. They may handle the selling of securities also, but usually confine themselves to organization and seek the assistance of small dealers in placing the securities upon the market.

155. Procedure in handling securities

The first steps in the marketing of securities have already been treated to some extent. It has also been pointed out that the investment banker does work of a promotional nature in connection with the securities which he handles. Like the promoter, the dealer in securities is concerned first with the investigation of the proposition. Whether he is approached by the promoter or the corporation directly, he must examine carefully the character of the proposition. He wants definite information regarding the reputation of the men in charge of the enterprise. He wants to determine whether or not the issue is sound, and to this end he will investigate the present condition and the prospects of the enterprise. If the investment banker is dissatisfied with either the reputation of the parties directly concerned in the proposition

or with its financial condition, he will have nothing further to do with it. If, on the other hand, the proposition appeals to him, he will initiate further inquiry by employing lawyers, accountants, and engineers.

When the banking house has satisfied itself that the enterprise is well conducted, that it is not assuming too great an amount of risk, and that it will realize a reasonable return of profit, it is ready to dispose of the securities. It is not usual for a reputable banking house to make use of a prospectus, in the sense in which that term is usually employed, to assist in the sale of securities. The prospectus is more widely used in the case of marketing securities direct. If a banking house does use a prospectus, it will, as a rule, differ decidedly from the prospectus used in direct selling and will be planned rather to serve as an aid in building up a list of prospective buyers.

Getting a clientele—It must be borne in mind that the standing of a banking house is of the greatest importance. It must build up a clientele and maintain it. This it does by employing salesmen, who travel about the country to sell and to keep in touch with clients, and by advertising. Occasionally a high-class prospectus is used to bring the name of the banking house before the public, but more often the better magazines are resorted to. Many banking houses build up an enviable reputation for integrity. The more substantial a concern becomes, the more prone are people to consider its word as final and to invest their savings merely upon the recommendation of the dealer in securities.

Because of the reputation and standing of the banking house, it feels justified in charging for the service it affords. Small issues require just as much investigation

and verification as do large issues which may be sold in large amounts. Bankers, therefore, favor the latter on a small commission in place of the former on a larger commission. A banking house realizes its profit either on the commission it charges or on the difference between the buying and the selling price of its securities.

If the banking houses or syndicates do not make use of the prospectus, they usually make some public announcement in order to attract the attention of prospective buyers to the issue which they have to offer. An illustration of the advertising circulars which they distribute is given in Chapter XVIII. It often happens that a great part of the securities are subscribed for some time before a public announcement is made. This gives to those directly interested a preference over the public, and the announcement comes only in case it is desired that the public, as a group, be called upon to participate.

The appeal of the investment banker, or the syndicate manager, is directed to numerous groups of people:

1. He may appeal to the small dealers, that is, to other bankers, dealers, and brokers.
2. He may direct his attention to the foreign syndicates that purchase securities.
3. He may distribute securities to small banks which supply a local demand or to savings banks.
4. He may appeal to corporations or to individuals standing in a fiduciary relationship, such as trust companies, or to those entrusted with the investment of the funds of large estates.

Obligations of the banker—In any case, the relation of the investment banker to his client remains the same. The character of the banking house rests, to a consider-

able extent, upon the reliability of the security which it offers the market. If the security proves to be a good purchase, the position of the house is more firmly assured. In case of a poor purchase, the house suffers accordingly. This brings us to a consideration of the obligations of the banking house. These obligations are a question of degree; they involve the difference between legal and moral obligations. Legally, a concern protects itself by inserting the following statement in its advertising literature: "The information contained in this folder is compiled from sources considered reliable and while not guaranteed is believed to be authentic." This relieves the dealer from any legal liability in connection with any incorrect statements, unless it can be shown that he knew them to be false. The moral obligation of a house extends just as far as that house sees fit. A reputable banking establishment will do much to retain the confidence of those upon whom it depends. To this end it customarily makes every effort to represent only reasonably safe propositions and makes no representations concerning these until their soundness is assured. In order to be sure of its position, it is not uncommon for a banking house to demand representation on a company's board of directors. A bank may purchase securities on the market in an attempt to create favorable sentiment among the investing public and thus to stabilize the market value of securities. If the securities do not prove of value, some institutions go so far as to repurchase them at the selling price. A banking house desirous of maintaining a good reputation is quite willing to extend its moral obligation.

The method by which securities are distributed directly is the one most commonly employed by the

investment banker. Sometimes, however, the investment banker calls to his aid another agency—the stock exchange. The stock exchange is also the principal channel through which investors dispose of any securities which they may have purchased. It is necessary, therefore, for us to know the nature and function of the stock exchange and its service as a distributing agency.

156. Stock exchanges

A stock exchange is a place provided for the purchase and sale of securities. The first exchange was established in London in order to afford a common meeting place for those interested in the buying and selling of securities. The idea has extended to all the leading countries and, in the United States, an exchange is found in all the important cities. The most noteworthy exchanges are in New York, Chicago, Philadelphia, and Boston, but there are also exchanges in the smaller cities. A stock exchange is a voluntary association of individuals. The membership is limited, and a seat in any large exchange can now be purchased only upon the retirement of a member. There is a membership committee which passes upon the membership.

Stock exchange is a trading place—The exchange itself does no business; it merely provides facilities for its members and regulates their conduct. The authority is vested in a board of governors who select one of their number as the chief executive officer. Those who trade on the exchange may be classified as follows:

1. **Investors**, who personally examine the facts relating to the value of securities or who act on the advice of reputable and experienced financiers and pay in full for what they buy.

2. **Manipulators**, whose connection with corporations issuing or controlling particular securities enables them, under certain circumstances, to move the prices up or down and who are thus in some degree protected from the dangers encountered by other speculators.
3. **Floor traders**, who keenly study the markets and the general conditions of business and acquire early information concerning the changes which affect the value of securities. Because of their familiarity with the technique of dealings on the exchange and because of their ability to act in concert with others and thus to manipulate values, they are supposed to have special advantages over other traders.
4. **Outside operators**, having capital, experience, and knowledge of the general conditions of business. Testimony is clear as to the result which in the long run attends their operations. Commissions and interest charges constitute a factor always working against them. Good luck or bad will change, in time; and since losses or gains only stimulate these men to larger ventures, they persist in trading until some serious or ruinous loss forces them out of the "Street."
5. **Inexperienced persons**, who act on interested advice, "tips," advertisements in newspapers, or circulars sent by mail, or who "take flyers" in absolute ignorance and with blind confidence in their luck. Almost without exception they eventually lose.*

Specialized exchanges—Exchanges specialize just as security dealers specialize in the type of security issues which they distribute. There are exchanges which deal only in the large undertakings; exchanges which handle only local issues; and exchanges which deal principally in one special kind of security. The New York Stock Exchange is the best example in the United States of an exchange which serves as the distributing agency for large undertakings, as it usually trades in lots of one hundred shares and multiples thereof. It has at times

*From report of Governor Hughes' Committee on Speculation in Securities and Commodities (1909), "Money Trust Investigation," pages 2186-2187.

dealt in lots of ten shares and multiples thereof, but, when this occurs, the issue is restricted to such amounts only; the larger lots receive special consideration. The St. Louis Exchange and the Baltimore Exchange are examples of institutions concerned largely with dealing in local securities. Frequently, corporations put worth-while issues on the market and interest the investing public by placing the securities on the local exchange. The corporation thus has a better opportunity to have the securities taken up, since the prospective buyers of such issues are found there. The Philadelphia Exchange is an example of one confining itself principally to the handling of one kind of investment. It deals for the most part in railroad securities.

157. Listing the securities

An exchange limits its trade to a certain number of approved securities. When securities are approved by an exchange, they are spoken of as being listed. The listing of securities is in the hands of a committee. Before a committee passes upon an issue of securities, it requires that they meet certain requirements which will be explained presently. It will be understood that the listing of securities does not effect their sale; it merely provides a way for making sales.

Application requirements—A corporation desiring to have its stocks or bonds listed on an exchange must make formal application and must also supply certain information concerning itself and concerning the securities which it wishes to have listed. Just what information is to be filed will depend upon the rules of the particular exchange. The information usually required is very clearly stated by Mr. Hastings Lyons as follows:

For stocks:

1. Seven copies of the charter with amendments to date; one copy attested by the secretary of state where incorporated, or other public authority.

2. Seven copies of by-laws, with amendments, one copy attested by the secretary of the corporation.

3. Seven copies of leases and special agreements, one copy of each attested by the secretary of the corporation.

4. One copy of the resolutions of stockholders and directors authorizing issue, each attested by the secretary of the corporation.

5. One copy of resolutions of the board of directors or executive committee, attested by the secretary of the corporation, authorizing, by name, the official to appear for listing securities.

6. Opinion of counsel (not an officer or director of the corporation) as to the legality of (a) organization, (b) authorization, (c) issue, and (d) validity of securities.

7. Detailed distribution of securities.

8. One copy of resolution appointing transfer agent and registrar, attested by the secretary of the corporation.

9. Certificate of proper public authority for issue.

10. Certificate of registrar of amount of securities registered at date of application.

11. Report of a qualified engineer covering actual physical condition of property of recent date.

12. Map of property and contemplated extensions.

13. Specimens of all securities to be listed.

For bonds:

1. All papers required for listing stocks and also seven copies of the mortgage or indenture, one copy (a) certified to by trustee, (b) with copies of all certificates of proper recording.

2. Trustee's certificate.

3. If bonds are convertible into stock, certified copies of (a) action of stockholders and (b) of directors, authorizing issue and reservation of stock specifically for conversion.

4. Certificate of disposition of securities redeemed or refunded.

5. Certificate as to collateral deposited.

6. Certified copy of release or satisfaction of underlying mortgages.

Under the National Securities Exchange Act of 1934 (discussed in Section 158), the Federal Trade Commission may require additional information from the issuer of securities to be registered on a national securities exchange. To some extent the requirements under the Act and the rules of the exchanges duplicate one another. Specifically, the Federal Act requires:

Such information as to the issuer and affiliates in respect of:

1. The organization, financial structure, and nature of the business.
2. Particulars regarding the terms, position, rights, and privileges of the different classes of securities outstanding.
3. Particulars regarding terms on which securities have been, or are to be, offered to the public.
4. Particulars regarding the directors, officers, and principal security holders and underwriters, their remuneration and their interests in the securities of and material contracts with the issuer and affiliates.
5. Particulars regarding remuneration to others than directors and officers exceeding \$20,000 per annum.
6. Particulars regarding bonus and profit-sharing arrangements.
7. Particulars regarding management and service contracts.
8. Particulars of options in respect of securities existing or to be created.
9. Particulars regarding material contracts not made in the ordinary course of business, and material patents.
10. Balance sheets for preceding years, certified by independent public accountants.
11. Profit-and-loss statements for preceding years, certified by independent public accountants; and such other information as the commission may by rules and regulations require as necessary and appropriate in the public interest or for the protection of investors.

In addition to meeting the requirements at time of registration, the "issuer" of a listed security must "keep reasonably current the information and documents" filed at the time of registration. Also, there must be furnished to the commission and to the exchange, as called for, the following information:

1. Annual reports, including, among other things, a balance sheet and profit-and-loss statement certified by an independent public accountant.
2. Such other reports and at such times as the commission may by rules and regulations prescribe.

Small issues are not usually listed on the stock exchange; it is not favorable for the marketing of such issues. Large issues are usually listed, and the advertising literature in connection with such issues frequently states that application has been made to have the security listed. If it is listed, a more ready market is afforded to the purchaser. The listing of a security on the exchange also offers some protection to the purchaser, since the exchange will not list it if there is any indication that it is not reliable. The report of the Committee on Speculation states the importance of listing to be as follows:

While the exchange does not guarantee the character of any securities or affirm that the statements filed by the promoters are true, it certifies that due diligence and caution have been used by experienced men in examining them. Admission to the list, therefore, establishes a presumption in favor of the soundness of the securities so admitted. Securities not authorized to be bought and sold on the exchange, but which have been subjected to such scrutiny, are said to be in the unlisted department, and traders who deal in them do so at their own risk.

Reasons for showing application only—The advertising literature in connection with large issues frequently states that application has been made to have the security listed, but it very rarely states that the issue has been listed. There are two reasons for this:

1. It usually takes a considerable time for the exchange to make the necessary investigation and to certify the security for listing; and the underwriters do not wish to wait until this can be done before offering the securities to the public. They, of course, desire to sell the securities and realize their profits as quickly as possible.
2. It may be regarded as undesirable for the underwriters to have the securities listed on the market until they have sold those which they own. If trading commences on the exchange, a price may be established which is lower than that at which the securities are being offered by the underwriters. This would, of course, result in a loss to them. In some cases, they may have the securities listed and use the exchange as a means of disposing of what they have on hand. Sometimes this method is necessary. It involves a great risk, but it offers an assured market. If necessary, the underwriters may bull the market so as to create a demand for the securities. This, in turn, involves the risk of the loss which they will incur if they are unable to bolster up the demand.

158. The National Securities Exchange Act of 1934

Following widespread agitation for "the curbing of Wall Street," Federal legislation was finally passed purporting to regulate trading on security exchanges. The Act provides for licensing or registration of all exchanges having a minimum of transactions. It establishes minimum margin requirements that may be altered, as the need arises, by the Securities and Exchange Commission. There are certain restrictions placed upon brokers with respect to

their borrowings from banks. There are regulations against manipulation of prices, against solicitation of proxies and giving of proxies with respect to customers' securities by brokers, members, and dealers, and many other minor regulations.

One provision is very interesting from the standpoint of internal financial management: any corporation or official, or any holder of 10 per cent or more of an issue of stock, who makes a profit in that stock on deals of less than six months' duration, must turn that profit back to the corporation. The provisions of the Act relating to the information which must be furnished by the security issuer to the exchange and to the regulating commission have already been given.

159. Stock exchange important in corporate financing

The investment houses and the stock exchange have been considered as the means through which securities are sold. Although it is probably clear that the dealer in investment securities serves as a distributing agency for the numerous corporations who desire to reach the investing public, the stock exchange may not appear as a very important means of disposing of corporate securities. As a matter of fact, through its various effects upon the corporations seeking capital and upon the individuals desiring to invest their funds, the stock exchange stands out as a highly important agency for raising capital. Some of these effects are as follows:

1. It provides a means of investing funds for short periods of time.
2. It stabilizes values of securities and so encourages investment.
3. It tests the worth of previously untried securities.

4. It facilitates the flow of capital into profitable lines of production.

In considering the determination of capital requirements, no matter how much a business may try to conserve its capital, it will, at intervals, carry idle funds. Instead of depositing them in a savings or commercial bank, where the interest would be lower, the company may invest in securities sold on the organized market, that is, on the stock exchange. By buying through this agency, the corporation knows it can sell whenever it becomes necessary to realize cash for immediate purposes. It is of even greater importance that the commercial and savings banks should use the exchange; for by so doing they can get securities from a great many sources and so distribute the risks. The exchange affords also a ready means for converting securities again into cash. The result of this relationship between the stock exchange and the banks is that greater liquidity of funds is established and thus the needs of business firms for capital is more readily met.

Exchange stabilizes prices—From the point of view of the investor, it is highly desirable that there be some way for him to know the fairness of the price he is paying for his securities. The corporation knows that if its stock is placed on the exchange, the various purchasers in bidding back and forth tend to establish a certain value for the security. Not only do prices thus become stabilized in any one exchange, but, through the help of the telegraph and wireless, prices in markets in different parts of the United States and abroad move toward the same point. Consequently, the stock of a company which is bid on by investors actively is more apt to become sta-

bilized in price than the security which arouses only a slight interest among bidders. Furthermore, if a company has more than one issue on the market at any one time, the stabilizing tendency will be even more apparent, because the various securities react upon each other to establish a general level of prices for the series. A corporation, whose stock has become stabilized in price as a result of the operations on the exchange, will attract prospective buyers who demand an established security. Anyone who purchases such stock is not only assured that the price has not been fraudulently fixed, but also that he will be able, at almost any time, to sell it at its value in cash. The buying of corporate securities is thus encouraged and capital funds are more readily supplied.

Exchange tests new issues—While the exchange provides the means of stabilizing the value of any particular investment, it also tests the worth of new securities whose financial soundness has not yet been proved. When a security issue does not sell readily, the underwriter faces the alternatives of either carrying the issue on borrowed funds or of selling it at a convenient opportunity and pocketing the loss. In either case the stock exchange aids the underwriter. Because stocks and bonds are readily salable through the organized market, the bank is willing to loan on them as collateral. If an underwriter decides to rid himself of the securities he has undertaken to sell for a corporation, he of course resorts to the mechanism of the stock exchange. If, ultimately, the success of the company is established, the securities will pass from the speculative to the investment stage and so become absorbed by the market. What really happens is a process of elimination—the corporation whose growth and wise administration is reflected in the

value of its securities wins out ahead of other companies which have not passed the necessary tests.

Exchange apportions funds—Finally, the stock exchange serves to distribute capital between different industries according to their profitableness. The prices of different securities reflect the conditions of these industries and point to the direction in which capital is going to be invested.

Suppose for a moment that the stock markets of the world were closed, that it was no longer possible to learn that railways were paying dividends, what their stocks were worth, how industrial enterprises were faring—whether they were loaded up with surplus goods or had orders ahead. Suppose that the information afforded by public quotations on the exchanges were wiped from the slate of human knowledge; how would the average man, how would even a man with the intelligence of a Pierpont Morgan determine how new capital should be invested? He would have no guide except the most isolated facts gathered here and there at great trouble and expense. A greater misdirection of capital and energy would result than has been possible since the organization of modern economic machinery.*

*Charles A. Conant, "Wall Street and the Country," pages 92-93.

Chapter XVII

Selling Securities Direct

160. Purpose of direct sale

Most of the securities issued by the large corporations are sold by investment bankers. They are handled either by a syndicate or by individual firms of brokers who buy and sell outright or deal in them on a commission basis. In some cases, however, it is not desirable or feasible to employ the aid of dealers. In such cases, appeal is necessarily made directly to the investor. Cases in which such an appeal may be made are:

1. Where securities are issued which are highly speculative, because of the nature of the operations of the company
2. Where securities are issued by a new company which is organized by men who have little or no financial standing or prominence
3. Where small issues are made
4. Where it is desired by direct appeal to secure the investment and influence of certain classes

161. Speculative securities

It was formerly the practice to sell large blocks of highly speculative securities by mail. Usually these were handled by a promoter, as reputable investment bankers did not care to jeopardize their prestige by marketing securities of a low grade.

Upon the passage of the Federal Securities Act, 1933, sale of highly speculative securities in interstate commerce is forbidden, except under certain circum-

stances. The act, for one thing, stipulated the kind of information which must be furnished the buying public in order that the prospective buyer may know the exact status of the company offering the security for sale.

As a consequence of this act, the promoter must either sell or deliver his securities personally to avoid the regulations of the act. Appeals to purchase by mail must be couched in truthful and conservative language.

162. The prospectus

The prospectus used in soliciting the purchase of securities by mail is no longer written to appeal to the acquisitive instinct of the purchaser. Instead of promising quick profits it sets out the essential facts concerning the history and business of the company offering the security for sale. Specific requirements for prospectuses are laid down by the Securities and Exchange Commission which is set up to administer the Securities and Exchange Act of 1933.

The extent of the details, which must be incorporated in a prospectus having for its purpose the offering of securities in interstate commerce, is illustrated by the one issued by the Shell Union Oil Company to sell \$60,000,000 in fifteen year $3\frac{1}{2}\%$ debentures. Among the pertinent facts given in this prospectus for the purpose of aiding the prospective investor to judge the quality of the security being offered for sale were the following:

1. That the securities have not been approved or disapproved by the Securities and Exchange Commission.
2. That the price of the debentures is 99% of the face value or the issue, the cost of selling or underwriting the issue 2%, leaving proceeds of 97% for the company. On every \$1000

debenture the selling price is, therefore, \$990, commissions \$20, and the net proceeds \$970.

3. That no dealer, salesman, or any other person has been authorized to give any information or to make any representation, other than those contained in the prospectus.
4. That the Company has filed with the Securities and Exchange Commission a registration statement giving more detailed information about the company and the issuance of the new securities than that contained in the prospectus.

In addition to the above recitals there is complete information in respect to: (a) The purpose of the issue; (b) The history of the business; (c) The general development of the business since 1930; (d) The policies pursued by the company in respect to charging depletion and depreciation; (e) the number and status of the litigation in progress against the company; (f) the number and nature of the contracts entered into by the company in the ordinary course of business; (g) certified financial statements of the company and its subsidiaries as of December 31, 1935; and (h) certified statements of operating income and expense for the years 1933, 1934, and 1935.

In contrast to prospectuses which went through the channels of interstate commerce in prior years, which were primarily statements of opinions and complete with inferences about the prosperity of other companies, the prospectus of the Shell Union Oil Company gives statements of fact, and proves by exhibits prepared by Certified Public Accountants its present financial status and the extent of its prosperity in the past.

Other firms wishing to distribute securities nationally file with the Securities and Exchange Commission a registration statement, as the Company offering the de-

bentures for sale, and thereafter prepare the prospectus for the public.

163. Securities of a new company

A new company is usually a speculative venture. It has neither customers nor goodwill. As a consequence, such a company is usually unable to enlist the support of the investment banker and must depend on a direct appeal to those from whom the original capital is to be obtained. Some part of this capital may be provided by the organizers, some secured from their friends, or from individuals living in the community where the business is to be conducted. However, lack of familiarity with the new business or possible lack of interest on the part of "home town" people may limit these investments. On the other hand, if the local capitalists can be convinced that the new company will be a new link in the industrial development of the city much capital may be raised from among these people.

If sufficient capital cannot be procured from organizers, friends, or local capitalists, consideration must be given to the sale of securities in a wider market. If this is to be done successfully, the enterprise must be more than a local manufacturing or mercantile concern. Large manufacturing concerns distributing a product over a wide area, public utility companies, and possibly street railways or bus companies, have a much better chance of securing capital by the sale of securities in other cities and states and in some cases in foreign countries.

The general prosperity of the country may be a determining factor as to whether the capital necessary for a new company can be obtained from a limited group. If the country is at the peak of a business boom, people with

means are more willing to speculate in securities of a new company than they are when the country is in a business recession or in a general business depression.

The extent to which promoters expect to remain with the new company also has a bearing upon the amount of money that they are willing to put into the new enterprise. If they expect to assume management positions in the new business they will be willing, no doubt, to make heavier contributions than they otherwise would.

164. Marketing small issues

Occasionally a well-established company may desire to issue additional securities but not in sufficient amount to make it profitable for the investment banker to handle them. The investment banker must always go through the process of investigation regardless of the size of the issue which he thinks of purchasing. Usually he must comply with certain legal formalities, and he must advertise the issue. The expense of doing these things makes it unprofitable for him to handle a small issue of securities. Since his rate of profit is small, he must depend on a large volume in order to make a profit. In the case of small issues, therefore, it is necessary for the corporation to appeal directly to prospective purchasers. This is usually done privately and without any attempt to present the proposition to the public. An appeal may be made to those who are known to possess surplus funds or an appeal may be made to those who are already interested in the business.

165. Sales to special classes

In some cases, corporations desire to place their stock in the hands of special classes in order to win their

favor and goodwill, or to repay a favor for past assistance to the corporation. If the stock is marketed through the investment banker, the corporation loses control of its disposition; for the banker will sell to those to whom he can sell most advantageously. The corporation may, therefore, appeal to those whom it would like to secure as purchasers, such as stockholders, employees, and customers.

Selling to stockholders—The executive officers of a corporation may desire that the additional stock which is issued be purchased by the present stockholders in order that the present control of the corporation may not be disturbed. If the stock is sold to the investing public, it may pass into the hands of competitors who may use the power thus vested in them to the injury of the original stockholders. It may also be thought that if the present capital requirements can be met by the stockholders, it will leave the privilege of appealing to the public to be employed in the satisfaction of future needs. Again, in the case of a very prosperous company, it may be thought that the original stockholders have borne the burden of the original financing of the company and are entitled to the advantages which go with the present ownership of the stock. In such cases the stock may be offered to the stockholders first, and only that portion which the stockholders do not desire will be offered to the public.

In some cases the corporation goes even further and grants certain privileges or preferences to the stockholders who purchase additional stock. For instance, the market value of the stock may be considerably above par, but the corporation may permit stockholders to purchase it at par. This offers them an inducement to buy,

since they can obtain the stock at a lower price than it can be secured by the public. Sometimes the corporation issues to the stockholders what are known as stock rights. These grant the holder the privilege of purchasing a certain amount of stock at less than market value. The stockholder, if he does not desire to purchase the stock, may sell these rights to the public, such rights being bought and sold on the market the same as securities.

There are three possible objects which the directors of a corporation may have in granting a subscription privilege to their stockholders:

1. Raising additional capital with as little expense as possible (in which case the stock will be offered to the stockholders at a price which is not much below its market price).
2. Making a concession in the nature of a dividend to the stockholders at the same time that they secure additional capital. (In this case the variation between the market price and the price at which it is offered to the stockholders will depend on the amount of the dividend which it is desired to give the stockholders.)
3. Increasing the capital stock more rapidly than the earnings of the corporation are increasing. (By issuing stock to the stockholders at a price which is considerably below the market price, they can thus "water" the capitalization and raise additional capital at the same time.)

Selling to employees—In recent years, there have been many attempts to bring about a better co-operation between the owners of a corporation and its employees. There are two principal methods which have been successfully employed in selling stock to the employees of corporations.

1. Giving the employe a share of the profits of the business (the amount being based usually on the amount of his earnings or on his length of service).
2. Getting the employe to become a stockholder and thus to become a part owner of the business. (Of course, it is anticipated that he will receive a share of the profits of the business as a result of his stock ownership.)

In order to induce an employe to purchase stock, it is usually offered to him under special conditions. He is usually permitted to buy it at less than market value and to pay for it on the installment plan. During the past few years, many of the large corporations have encouraged the purchasing of stock by their employes. Some of the advantages which are claimed for selling stock to the employes of the corporation are:

1. It serves to retain employes in the service of the company because it increases their interest in the corporation.
2. It serves as an incentive for better service, since the employe shares in the success of the company.
3. It teaches the employe thrift and enables him to be more prosperous, hence more contented and efficient.
4. It enables the corporation to secure funds easily and cheaply.

Selling to Customers—Occasionally capital may be secured by selling securities to customers. This is not a very prevalent method outside of co-operative enterprises. The chief merit of this plan is that it tends to secure the permanent interest and trade of the customer. If he becomes a stockholder, he is not likely to trade with competitors. It can easily be seen that the use of this plan is limited.

166. Methods of direct appeal

When it is desired to sell securities by means of direct appeal, two things are necessary:

1. The names of those who are probable prospects must be secured. It is evident that if these names are not properly chosen, much needless expense will be incurred.
2. The proposition must be presented to these prospects in an effective manner. It is useless to obtain prospects unless it is possible to make sales to a reasonable proportion of them.

In the preceding discussion, it has been explained that sales may be made to employes, stockholders, and customers. The names of these are, of course, easily accessible. If it is desired to sell to local capitalists, their names are also available. It may also be possible to obtain other names through the parties mentioned above, and the prospects thus secured may, in turn, provide the names of other prospects. In this manner a desirable list of prospects may be obtained. There are also other means by which names may be secured. A list of the faculty members of institutions of learning may be obtained from the published bulletins. Members of various kinds of associations may be obtained from their publications.

Presenting the proposition—After the names of prospective buyers have been obtained, it is then necessary for the seller to consider several things:

1. The best way in which to approach the individual (whether by the use of the prospectus, by personal letter, or by recommendation and introduction).
2. How to arouse the interest of the prospective investor. (This will be needed whether he already has some connection with the company or is an outsider. If he is a

customer, he will be interested in any concession that the corporation may be able to allow. If an employe, he will be concerned with the success of the corporation and the chances for profit sharing. If the prospect is a shareholder, his interest will have been already aroused to some extent. In any case such an appeal must be made as will result in securing his interest.)

3. How to make the prospect feel that the proposition is sound. (The seller of securities can usually create this belief in the mind of an investor by showing him that the business is in a thriving condition.)
4. How to show the prospect an opportunity to increase his earnings by purchasing the securities. (If he lives in or near the town in which the plant is located, he may be appealed to on the ground of local pride.)
5. The fifth and last step of the salesman's function is to complete the sale, and this is not particularly difficult if he has been successful up to this point.

167. Sale of securities at public auction

The sale of securities at public auction is not common in the United States, but has been used to a considerable extent in England for certain kinds of securities. It has also been used to some extent in Canada.

To sell at auction means to sell to the public and to the highest bidder. The securities are usually placed upon the market after public announcement has been made. In England, provision has been made by statute to regulate sales of this nature. This statute provides, first of all, that the public through adequate announcement must know of the auction at least twenty-eight days before the day set for the sale. The Board of Trade becomes custodian of a sealed letter containing the reserved price which has been fixed for the shares, no block of which offered for sale may be valued at more than £100 nominally. After a transaction has been completed, the purchaser is required to pay the total sum

within three months after the date of the auction or after the completion of the sale of these particular securities. Should any shares be left unsold at the reserved price, previous shareholders, consumers, and employes may bid upon them; and if, as a result of this, there are still shares without purchasers, a second public sale shall be attempted. Finally, should this last effort have proved unsuccessful, the directors may dispose of the remaining shares through the most expeditious means and at the price likely to bring in the most purchasers.

168. The investor's questions

There are a number of questions that an investor ought to consider before he undertakes to purchase securities. The "Wall Street Journal" lists the following, the answers to which ought to assist a prospective investor in determining the nature of the securities offered for sale by a proposed combination or trust. Similar questions may well be asked by every investor in securities:

1. What were the plants able to earn on the average for the five years preceding the combination?
2. What would this amount have paid on the present amount of stocks?
3. How much have expenses been reduced by consolidation?
4. How much have gross earnings been increased by consolidation?
5. What will the combination have to earn net in order to pay seven per cent on its preferred stock?
6. How much in excess of that amount is the company earning now?
7. What is the amount of the net floating debt?

8. How is this floating debt secured?
9. Is the corporation hampered by burdensome contracts?
10. Can it enforce its own contracts with buyers?
11. What is the extent of the competition encountered?
12. What is the possibility of reducing operating expenses?
13. Is the management in every way competent and satisfactory?

The following outline, which is more in detail, is of importance:

1. **The enterprise.** Is it sound, is it profitable elsewhere, and can it be made profitable under the present conditions? Is it better situated than other similar concerns, and is it equipped to meet competition?
2. **Organization.** What is the nature and extent of the capitalization? What are the provisions regarding stock issues?
3. **Present condition.** What is the nature and extent of the property? What are the operations of the enterprise? What are the resources and liabilities?
4. **Management of enterprise.** What are the duties and reputations of the directors? What are the duties, reputations, and qualifications of the officers?
5. **The money.** How is the money to be expended: to go into the treasury, to pay off debts, to meet operating expenses, or for development?
6. **The proposal.** Is the price for stocks and bonds fair? What is the nature of the securities?

The above questions ought to assist an investor in investigating an enterprise. The list is by no means complete, but it will help in judging a reliable proposition.

169. Conclusions of direct sale

We have already noted the large expense incident to the sale of securities through dealers. If there were

no other reason than the time and expense involved in investigating an issue before accepting it, the dealers would be justified in charging for their services. But besides this, they are assuming a risk when they agree to sell a company's securities which, although expected to turn out satisfactorily, may not do so. It does not pay a dealer to assume responsibility for the sale of a block of stocks or bonds, unless the block is large enough to bring in a fair return. For this reason, dealers will rarely handle issues of less than \$500,000.

But many issues do not approach this amount. The only means, therefore, of marketing such securities is through the managers or the promoters of the corporation. When this method is resorted to, it is done only because other means are found impossible or impracticable. The sale by the corporation is of very little advantage to it, for finding individuals who will buy requires time and expense not ordinarily assumed by a company and which it cannot well afford. However, there is something of an advantage in selling direct, because of the fact that certain investors believe that in this way they are relieved of paying any expense for marketing the securities. As a matter of fact, even if the commission to brokers and underwriters is eliminated, selling direct involves expenses which must be paid by the company, and these are usually quite large.

Chapter XVIII

Accounting and Statistical Data Necessary in Acquiring Capital

170. Need for such data

When a business is first organized, a considerable part of the original capital may be provided by the organizers. This is particularly true in the case of the sole proprietorship, the partnership, and the small corporation. It may not be true in the case of the large corporation, especially if the service of the promoter is employed in its organization. If the original capital is to be secured from those who are familiar with the business or with the contemplated business, little information need be prepared for their use. As the business expands and grows, however, it is very likely that any additional capital which may be required in its operations will be secured from people who are not engaged in the management of the business and who, therefore, are not familiar with its operations or with its financial condition. In order that they may judge as to the advisability of entering into relations with the business, it is necessary that they be supplied with certain accounting and statistical data with reference to it. It is the purpose of the present chapter to explain and illustrate the data required.

171. Nature of the data required

Some of the data required by prospective investors is of an accounting nature, that is, data which is provided by accounting reports prepared from the accounting records; while some of it is of a statistical nature and may

be obtained independently of the accounting records. The extent and nature of the data required will depend upon the nature of the contract into which the company is to enter in order to obtain the desired capital. Usually the longer the obligation is to run, the more extensive the information desired. This is due to the fact that the longer the time the investor has to wait before his claim against the company is to be satisfied, the more possibilities there are for unfavorable change in the financial condition of the company. The term "investor" is used broadly to refer to all who provide capital funds for the conduct of the business. In this sense the trade creditors of the business would be regarded as investors, for though any particular trade creditor may not provide capital for any appreciable length of time, there is a certain amount of capital provided by the trade creditors as a group.

In the following pages the information desired by each group which provides capital will be discussed, commencing with the group which requires the least information and then considering the additional information required by each of the other groups. Classified in this manner, the various groups desiring information with reference to the business are as follows:

1. Merchandise creditors
2. Bank creditors
3. Purchasers of short-term notes
4. Purchasers of long-term notes
5. Purchasers of bonds
6. Purchasers of stock

172. Merchandise creditors

When merchandise is sold on account, it is usually for a relatively short period of time. It is seldom that

terms of more than sixty days are granted. Consequently the vendor of the merchandise is interested primarily in the present financial condition of the vendee and in his promptness in payment as evidenced by his past relations with the vendor or with other firms. With reference to the financial condition of the vendee, the vendor wants to know primarily that there is no danger that the company will become insolvent before the payment of the debt and that he has sufficient current assets from which to pay his current liabilities. This information he can obtain from a balance sheet and a statement of profit and loss. In the past, business firms have been prone to be satisfied with a balance sheet only. In recent years, they have come to see that the financial condition of a firm cannot be determined by a consideration of its assets and liabilities only.

The promptness with which a firm pays its debts can be determined in several ways. An investigation of its credit rating as shown by the mercantile agencies will indicate this; for one of the most important factors in determining credit rating as stated by the mercantile agencies, is the reputation of a firm for prompt payment. References may also be provided by the vendee, and these may be consulted by the vendor. There are also, in the various cities, credit men's associations which collect information concerning business firms and furnish this, upon request, to their members. These and other sources are employed by wholesalers and manufacturers in determining the credit rating of firms.

173. Bank creditors

The information which a bank requires with reference to applicants for credit is not very different from

that required by mercantile firms with reference to those seeking to purchase merchandise on account. It must have information regarding the financial standing and credit rating of the applicant. Consequently it requests financial statements and investigates the credit rating of the borrower. The bank, however, bears a somewhat different responsibility in connection with the loans which it grants from that of the merchant or manufacturer in connection with the sale of goods on account. In the first place, the bank is lending the money of others and must be conservative. It is hemmed in by legal restrictions, and its business depends on its reputation for stability. If it becomes in the slightest degree financially embarrassed, its business may be ruined and it will suffer dire consequences. In the second place, banks have found by experience that when a relation of lender and borrower is once established, it is rather difficult to terminate it, and the customer will expect to borrow almost continuously thenceforth. Therefore a bank does not care to make an initial loan to a business unless its investigation indicates that the financial condition and credit standing of the firm is such as to warrant a continuing relationship. This means that the bank usually investigates a borrower somewhat more thoroughly than a mercantile firm would investigate a prospective purchaser of merchandise on account.

174. Purchasers of short-term notes

Short-term notes are usually sold through note brokers in the manner previously explained. Such notes are current liabilities of the issuing firm and do not differ materially from the notes issued to banks or to merchandise creditors. The information required by note brokers

with reference to those seeking to sell their notes is quite similar to that desired by banks and trade creditors. The note broker must sell the notes which he buys to others, usually to bankers who have no personal connections with the issuer of the notes. Consequently, the broker must be exceedingly careful in the selection of his customers; for otherwise he will have notes on his hands of which he cannot dispose. A bank may hesitate to refuse a loan to a depositor whose business it desires to retain, even when it thinks that the request should not be granted. When the bank is purchasing notes from the note broker, however, it has no personal interest in the payer of the notes and will not consider notes issued by a firm about whose financial condition there can be any question. This forces the note broker to investigate his prospective client very thoroughly.

Credit investigation by note broker—The note broker's investigation consists of an examination of the financial condition of the firm as reflected in its accounting reports and in a first-hand investigation of its credit standing by interviewing banks, merchants, and others who have had financial dealings with it. The note broker puts considerable emphasis on the financial condition of the firm as shown by its balance sheet and statement of profit and loss. If possible, he obtains these reports covering a period of years, so that, by comparison, he may see the tendency of the business. The broker usually requires that these reports be prepared and certified by a certified public accountant. In this he is more exacting than the banker, for though the latter will state that certified statements are desirable, it is nevertheless true that only a small part of the statements submitted to banks are certified. The banker often does not urge that such

statements be presented for fear the customer may be offended and go elsewhere.

175. Purchasers of long-time notes

The amount of information that prospective creditors desire concerning a borrowing company increases as the length of time for which the contemplated credit is to run increases. Consequently, the purchaser of long-term notes requires more information with reference to the business issuing them than does the purchaser of short-term notes with reference to the firm issuing the latter. Both are equally interested in the financial condition of the firm, but the former is more interested in the long-time financial condition of the firm and its earning capacity over a number of years than is the latter. The purchaser of the long-term notes is also interested in the other liabilities of the firm which might in the years to come have a priority over his claim. He is interested, therefore, also in the possibility of other liabilities which may be contracted in the future.

How long-time notes are sold—Long-time notes are usually sold through brokerage firms in the same way in which bonds and stocks are sold. It is customary for such firms to gather certain data with reference to the company and then to publish a circular of information which they may use for advertising purposes. These circulars are more or less standard in form, the same type being used to advertise long-time notes, bonds, and stocks. The first page of the circular contains a summary statement of facts by the bond house which issues it; gives a brief description of the securities offered for sale; and calls attention to a few of their most important characteristics. This is followed by a more lengthy statement

in the form of a letter from the executive head of the business by which the securities are issued. This letter supplies those statistics and facts with reference to the business which it is thought will be of interest to prospective purchasers of the notes.

176. Purchasers of bonds and stocks

The information required by purchasers of bonds is not very different from that required by purchasers of long-term notes. The bonds run for a longer term than the notes, and therefore it is more important to see that the security behind them is protected so that it will not be impaired during their life. It is also important to obtain information which will assure a constant income sufficient to meet the interest requirements. To this end, there is usually given the yearly net earnings of the company for a number of years and a comparison is made between the net earnings and the total interest charged, including the interest on the present issue. The purpose for which the bonds are issued and the anticipated effect of the additional funds upon the prosperity of the business are usually stated. Oftentimes there is given also an analysis of the company's business so as to show its possibilities for expansion or the stability of the demand for its product. A balance sheet and an income statement are invariably presented, although they are usually in very condensed form.

The stockholders of a corporation receive an income on their investment only if profits are made, and there can be no profits available for dividends until all expenses, including interest charges on all outstanding obligations, have been paid. The stockholders are, therefore, interested in the net earnings of the business, and since the

interest charges on bonds and similar obligations are a fixed and constant charge, they are usually interested in the amount and nature of the obligations of the business. They are also interested in the amount of these obligations because, in case of the dissolution of the company, these obligations must be paid before the claims of the stockholders can be satisfied.

As explained in the chapters dealing with capital provided by the proprietors, capital stock may be of different kinds and have different rights and privileges attaching to it. Stockholders, in purchasing stock, desire to ascertain very carefully whether there is any stock enjoying greater privileges and rights than that which they are purchasing and, if so, what these rights and privileges are.

Chapter XIX

Legal Information Necessary for the Sale of Securities

177. Need for legal assistance

"There are times in the financing of any enterprise of material value when legal assistance is desirable and perhaps essential. If a development contract is to be entered into, if a partnership is to be formed, if a corporation is to be organized, and particularly, if promoters are to be dealt with, or if contracts are to be drawn up with moneyed men who are to finance or to be otherwise interested in the enterprise, a lawyer should be employed."*

The financing of a business under modern conditions leads to many complex situations. If such financing is done in a rational way, it must follow a well-formulated plan, and such a plan must be based on accurate and comprehensive information. In addition to the needed accounting and statistical information it is often necessary to have information of a legal nature. The reasons why such information is required are well indicated by the above quotation from Mr. Conyngton. The securing of funds in any considerable quantity involves the making of contracts which involve at least three parties: (1) the present stockholders and creditors of the company, if any; (2) the purchasers of the securities; and (3) the public as represented by the state.

The legal information required in determining how the legal rights of each of these parties are protected when arrangements are being made for funds may be classified thus: (1) information required when a new com-

*Conyngton, "Financing an Enterprise."

pany is formed; and (2) information required when additional securities are issued by an existing company.

178. Formation of a new company

In the case of the formation of a sole proprietorship or a partnership, there are no difficult legal problems involved. Usually the state imposes no legal restrictions upon the formation of such forms of business organization, and, since the capital is provided usually by those who are responsible for organizing the company, there are no contracts to be entered into between the company and outsiders. In the case of the partnership, there is an agreement between the partners with reference to the rights and obligations of each. This agreement must have all the essential elements of a contract and is described as follows:

Articles of copartnership—Because of the somewhat peculiar relationship existing between the partners, involving mutual agency, unlimited liability of individual members for partnership debts, as well as the limited life of the partnership, disputes, misunderstandings, and difficult situations are apt to arise. In order to avoid these, or at least to reduce them to a minimum, it is desirable to have a written contract which will provide stipulations covering the points about which misunderstandings might arise. Such a contract is known as the Articles of Copartnership and should contain the following stipulations with such additional provisions as may be applicable to a particular undertaking:

1. Date
2. Names of the partners
3. Statement that they are to be partners
4. Nature of the business or undertaking
5. Duration of the relation
6. Name of the firm and its location
7. Amount of the capital and each partner's investment
8. Payment of expenses

9. Distribution of profits and sharing of losses
10. Rights of partners to withdraw money for personal use
11. Keeping of books of account
12. Duties of the several partners
13. Restraint upon partners as to becoming sureties, etc.
14. Special provisions and stipulations
15. Proper provisions for dissolution
16. Division of assets after dissolution*

Articles of incorporation—The securities of most corporations are held by a number of individuals, and the activities of a corporation are usually such as to bring it into contact with many people. The corporation enjoys certain privileges in the way of limited liability of stockholders and it has also the power to act as a legal entity. These advantages are not accorded to a sole proprietorship or to a partnership. It is somewhat difficult for the outsider to obtain satisfactory information with reference to all phases of a corporation's activities. For these reasons the state seeks to protect its citizens by imposing certain legal requirements upon the corporations which are organized and doing business within its jurisdiction.

Initial requirements—Before a corporation can transact business, it must obtain a charter from the state in which it is organized. After it has obtained a charter from one state, it is usually permitted to operate in other states, upon filing a copy of its original charter with the proper authorities in the state in which it seeks to do business. The requirements of the different states with reference to the incorporation of companies are not uniform, but the following requirements, quoted from the statutes of New York State, relative to a mercantile or manufacturing corporation are typical:

*McKinsey, "Bookkeeping and Accounting."

Except as provided in Section 2A of this chapter, three or more persons may become a stock corporation for any lawful business purpose or purposes . . . by making, signing, acknowledging, and filing a certificate which will contain:

1. The name of the proposed corporation
2. The purpose or purposes for which it is to be formed
3. The amount of the capital stock and, if any portion be preferred stock, the preferences thereof
4. The number of shares of which the capital stock shall consist, each of which shall not be less than five nor more than one hundred dollars, and the amount of capital not less than five hundred dollars, with which said corporation will begin business
5. The city, village, or town in which its principal business is to be located. If it is to be located in the city of New York, the borough therein in which it is to be located.
6. Its duration
7. The number of its directors, not less than three.
8. The names and post-office addresses of the directors for the first year
9. The certificate of incorporation must be signed by the three or more persons who make application for the charter, their signatures must be acknowledged by a notary public or some county official, and the certificate must be recorded by the proper county and state official.

Government of corporations—A corporation is governed by its charter and its by-laws. The charter must be prepared so as to meet the requirements of the state law and, in addition, it should be drawn so clearly as to protect the interests of the various classes of stockholders. The by-laws should be drawn with the same end in view. Both the charter and the by-laws should be prepared by attorneys of recognized ability. The charter and the by-laws should be prepared also with a proper consid-

eration for the future growth and possibilities of the corporation. It is desirable therefore that the executive officials of the business shall co-operate with the attorneys in the preparation of the charter and the by-laws. If they are prepared by the attorneys alone, only the legal phases may be considered with the result that the future of the corporation is not properly provided for.

179. Issuance of additional securities

Corporations have often been conducted by a few stockholders who were in control to the detriment of the remaining stockholders and to the injury of the purchasers of its securities. In order to protect the investing public as well as the original stockholders and bondholders of the corporation, many states have passed laws regulating the issuance of securities by corporations. These laws were passed first with reference to public utilities. There are probably two reasons for this:

1. The recognition that public utilities are quasi-public corporations and are, therefore, subject to the control of the public.
2. The fact that public service commissions, which have supervision and control of public utilities, had been created and were, therefore, available for enforcing regulations with reference to the issuance of securities.

New York regulations—New York was one of the first states to provide for such control and supervision. The act creating the Public Service Commission of New York provides the following:

Any common carrier, railroad corporation, or street railroad corporation, organized under the laws of the State of New York, may issue stocks, bonds, notes, or other evidences of indebted-

ness payable at periods of more than twelve months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension, or improvement of its facilities, or for the improvement or maintenance of its service, or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes, or other evidences of indebtedness is reasonably required for the said purpose of the corporation. For the purpose of enabling it to determine whether it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings, and examine such witnesses, books, papers, documents, or contracts as it may deem of importance in enabling it to reach a determination.

Thus it can be seen that whenever a New York public utility corporation desires to issue new securities, it must have the permission of the public service commission, which will not give the requested authority until the affairs of the corporation have been investigated.

Purposes of control—The jurisdiction of public service commissions over public service corporations is intended to protect the public against excessive issues of securities, and to protect the investor against the improper expenditure of funds. The work of the commissions has been so well carried out that whenever a public service commission approves the issuance of stocks, bonds, or notes, it is regarded by the investing public as a guarantee that such an issue is reliable.

As an indication of the method by which the commission of New York State determines the propriety of an issue of bonds, the following outline of its procedure is given:

1. An estimate will be made, from a consideration of the results of operation of existing roads, of the probable gross earnings.
2. An estimate will be made in like manner of the probable operating expenses, taxes, and depreciation charges.
3. The excess of earnings over the disbursements which must be made before fixed charges can be met represents the sum which is applicable to fixed charges.
4. The maximum bond issue to be allowed must be determined by the sum thus ascertained to be applicable to the payment of the interest charge.
5. No bond issue should be permitted which will create an interest charge beyond an amount which it is reasonably certain can be met from the net earnings.
6. Stock representing a cash investment should be required to an amount sufficient to afford a moral guarantee that the enterprise is likely to prove commercially successful.
7. The order authorizing such stock and bond issues will contain approximate provisions designed to secure the construction of the road in accordance with the plans and specifications upon which the authorization was made and not in excess of the actual requirements.
8. If the allowance proves inadequate for the required purposes, an application for further capitalization may be made, upon which application the expenditure of the proceeds of stock and bonds already authorized must be shown in detail.*

180. Blue-sky laws

The first supervision of the states over the affairs of corporations was in connection with public utility corporations, but, this principle having been once established, it was quite logical that it should be extended to apply to other types of corporations. The principal attempt at regulation of mercantile and industrial corpo-

*Mead, "Corporation Finance."

rations has been with reference to their organization and to their issue of stocks and bonds. The laws governing the issue of stocks and bonds have come to be known as blue-sky laws.

In general, there are two types of blue-sky laws: (1) regulatory laws, and (2) antifraud laws. Forty-three of the forty-eight states now have regulatory laws, and four have so-called antifraud acts.

Under the regulatory acts, two methods are used to enforce responsibility and accountability in connection with security issues by:

1. The licensing of dealers and brokers
2. The licensing of specific security issues

The regulation of dealers—In order to obtain a license, under most blue-sky laws, the dealer or broker must demonstrate that he is solvent and financially responsible, and that there are no “black spots” on his previous record. The act of registration itself, aside from the personal and financial information required, makes it possible for the state commission to maintain a very close supervision of security dealers, and to apprehend very “early in the game” those who have engaged—in many cases, those about to engage again—in illegal stock promotion and selling practices.

The regulation of security issues—In general (with specific exceptions), all securities that are to be offered for sale must be licensed under the blue-sky laws of each state within which they are to be sold. The state commission determines whether or not the security in question shall be licensed and under what classification it shall be listed.

The factors actually considered in determining whether or not a given security should be licensed appear to be somewhat different for the several state commissions. In general, the factors listed below are considered, but different weightings are given in different situations. These factors are:

1. The character of the management of the enterprise
2. The valuation placed on assets
3. Earning power

In some cases, unfortunately, reasons for admission or non-admission seem to be lacking entirely, and the decision given appears to be based on "hunch," or on prejudice. In particularly flagrant cases, court action has been taken to overrule the decision of the commission.

Sales in violation of blue-sky laws are either void or voidable at the option of the purchaser. Penalties provided include both fine and prison terms.

Texas Blue-Sky Law—The following provisions regarding the interpretation of the Blue-Sky Law of the State of Texas are taken from a digest of an opinion of the attorney-general construing the law:

1. The following classes of corporations are exempt from the provisions of the Blue-Sky Law: All corporations, or the promoters thereof, which do not directly or indirectly agree to pay any commission, promotion, or organization fees incident to the sale of its stock, unless such corporations are mining, oil, gas, or townsite corporations. In the case of the last named character of corporations, the provisions of the Law apply, regardless of the question of promotion or other fees incident to the organization.
2. The terms of the Act do not apply to any national bank nor to any corporation having a charter granted under any Act of Congress, nor to any state bank or trust

company organized under the laws of this State, nor to any corporation organized under the Federal Reclamation Act, nor does the Act apply to any corporation or its promoters where such corporation organized under the laws of this State does not sell or contract to sell its stock to more than twenty-five bona fide purchasers; provided such corporation does not act as agent or trustee, holding or sales company, in the promotion of any concern included within the terms of the Act. This exemption applies to mining, oil, gas, and townsite corporations the same as it does to other corporations.

3. The act does not apply to any railroad corporation, interurban, nor street railway.
4. It does not apply to the sale of stock of the corporation by a bona fide owner of the same, who in good faith bought the same and is not acting, directly or indirectly, as a promoter or agent of the corporation.
5. Nor does the Act apply to a bona fide stockholder or stockbroker in the sale of stock, which stock has been theretofore issued and sold, bona fide to some purchaser; provided, however, that such purchaser or broker is not acting, directly or indirectly, as promoter of the corporation.
6. The Blue-Sky Law applies to a townsite, mining, oil, and gas corporation incorporated under the laws of this State where its increased capital stock is paid out of the surplus earnings of the corporation; provided, however, that the purpose of the increase is to sell the stock based on its increased capital.
7. But where the increased capital is paid in by the existing stockholders and the stock is issued directly to them, or where the stock is issued against the surplus earnings of the company in the nature of a stock dividend, then such acts do not come under the provision of the Law.
8. Any act of the corporation which does not amount to a sale of stock by it or by promoters for it is not subject to the law.

The intent and purposes of the Act are well summarized in the following:

An Act to regulate and supervise the sale and purchase, in this State, of stocks of private, foreign and domestic corporations organized for profit, which propose to increase their capital stock; and to regulate and supervise the sale and purchase, in this State, of stocks of private, foreign and domestic corporations being organized and hereafter organized or proposed to be organized for profit; and to regulate and supervise the offering or contracting for sale and purchase of such stock of such corporation or proposed corporation, and to fix commission and promotion fees allowed to be charged; and providing for service of process, examination fees, and exempting certain corporations from the effect of this Act; and providing penalty for the violation of the provisions of this Act, and declaring an emergency.

Illinois Blue-Sky Law—It will be noticed that the Texas law exempts certain specified kinds of corporations. The law of some states, instead of exempting certain kinds of corporations, classifies security issues according to certain characteristics and then exempts certain classes and makes different provisions for the different classes which are subject to the law, the Illinois Securities Law, as revised, is one of the best of the blue-sky laws. It classifies corporation securities as follows:

Class A. Securities, the inherent qualities of which assure their sale and disposition without the perpetration of fraud. These include securities of governments; banks, trust companies, and insurance companies within the state; public utilities; and in some cases, listed securities; and others. These securities may be sold without the filing of any statement in the office of the secretary of state.

Class B. Securities, the inherent qualities of which, or in the nature of one or both parties to the sale thereof, assure their sale and disposition without the perpetration of fraud. These include non-repetitive sales by the owner, additional stock sold directly to stockholders, and others. These securities, sold in the manner described above, are not subject to the provisions of the Act.

Class C. Securities based on an established income. This class includes the securities issued by any business which has been in continuous operation not less than two years and which has shown satisfactory net profits (defined exactly), exclusive of all prior charges. The filing of a statement describing the securities to be sold is the principal requirement in this instance.

Investment Contracts. This class includes investment, annuity, and installment contracts of various kinds. These may be sold only after a deposit of securities of a satisfactory nature has been made with the secretary of state, together with a statement describing the securities to be sold.

Investment Trusts. This class includes shares of a corporation which holds in trust for its stockholders the shares of other corporations. In addition to the required statement describing in detail the security, the operations of the trust, etc., there is a further requirement that "on the date of sale to the public, the market value of the securities underlying the same, plus the fair value of any other property and cash applicable to each investment trust share so sold, is equivalent to not less than 90 per cent of the sales price of such investment trust share to the public."

Class D, or Speculative Securities. This includes all securities not falling into one of the five groups previously described. It is to this group that most of the commission's attention must be given. The restrictions on the sale of Class D securities is summarized in some detail below:

1. Provisions governing the offer of securities for sale.

Before any Class D securities may be offered for sale, there must be filed in the office of the secretary of state documents and statements as follows:

1. A description and the amount of the securities intended to be offered for sale.
2. If the issuer is a corporation, a certified copy of the charter or articles of incorporation and by-laws.
3. If the issuer is a firm, trust, partnership, or unincorporated association, a copy of the articles of partnership, association, or trust agreement.
4. The names, addresses, and prior occupations during a period of not less than ten (10) years prior to filing such statement (giving details as to time, place, and address of employer and reasons for discontinuance of employment) of the officers, directors, or trustees of the issuer, if it be a corporation, or of the persons composing the issuer, if the issuer be a non-incorporated association.

5. A description of the nature of the industry engaged in or intended to be engaged in and the approximate time when such industry was or will be established.
6. An inventory showing the assets of the issuer.
7. An appraisalment of the assets of the issuer.
8. A statement in detail of the gross income of the issuer and the source or sources thereof, and of its operating and other expenses for a period of twelve (12) months prior to the date of filing such statement, or for the period of the existence of the issuer if less than two years prior to the date of filing.
9. A copy of the most recent balance sheet of the issuer, showing the financial condition of the issuer at a date not more than thirty (30) days prior to the date of filing and giving an analysis of surplus account from inception of such issuer.
10. A copy of the mortgage, trust deed, indenture, or writing securing the securities, whereunder the same are issued, if any such instrument there be.
11. A copy of the form of the securities intended to be offered.
12. A copy of any and all subscription blanks to be used in the sale thereof, which subscription blanks shall have printed thereon, "These are speculative securities."
13. A statement as to the manner in which the securities are to be offered and sold.

At any time, either before or after the filing of such statement, the secretary of state may designate certified public accountants to make examination of the books, records, and documents of the issuer and make a report thereon.

If the statement discloses that any of such securities are intended to be issued for any patent right, copyright, trade-mark, process, or goodwill, for promotion fees or expenses, or for other intangible assets, the amount or nature thereof should be fully set forth and the securities issued in payment therefor should be delivered in escrow to a bank or trust company designated by the secretary of state, under escrow agreement that the owners of such securities shall in the case of dissolution or insolvency not participate in the assets of the corporation until after the owners of all other securities have been paid in full.

In case any statement or document filed in the office of the secretary of state shall in his judgment be inadequate or not in compliance with the Act, or in case the plan disclosed by such documents would in his judgment

tend to work a fraud upon the people, or if it appears that the documents are false in any material particular, the secretary of state shall apply for an injunction to restrain the further sale of such securities.

II. Provisions affecting dealers in securities.

When Class D securities are to be sold through a solicitor, agent, or broker, a statement must be rendered giving the name, residence, qualification, occupation, and business experience of such solicitor, agent, or broker for the preceding ten years. The signatures of each and every solicitor, agent, or broker shall be attached to such statement.

Any dealer or owner may sell Class D securities only after filing in the office of the secretary of state a statement of the amount and description of the securities to be sold by him, the maximum price for which they are to be sold, and giving his address by street and number, qualifications, occupations, and business experience for the preceding year.

An irrevocable contract must be executed by such solicitor, agent, and broker authorized to offer or sell such securities to the effect that the issuer will receive in cash not less than 80 per cent of the proceeds of the sale of the securities, without liability to pay any further expenses or commission.

So long as any security continues to be offered for sale, new and supplementary statements must be filed at the expiration of each six months' period, showing: (1) the amount of securities sold, sale price, the amount of cash proceeds received therefor; (2) all changes in the financial conditions of the issuer or in its management or property, accompanied by a copy of the most recent balance sheet, which must be not more than thirty days prior to the date of filing.

Each financial statement, prospectus, advertisement, etc., published or distributed for the purpose of selling securities in Class D shall contain the following words in bold-faced type: "Securities in Class 'D' under Illinois Securities Law. These are speculative securities." But it shall be unlawful to make any other reference to the fact that the provisions of the law have been complied with. Furthermore, all such advertising literature shall contain a statement of the assets, liabilities, income, and expenses of the issuer, the law under which the issuer was incorporated or organized and the names and

addresses of all officers, directors, and trustees of the company. A copy of the financial prospectus, etc., shall be filed in the office of the secretary of state within ten days after the first circulation, publication, or distribution. It shall be unlawful to publish or circulate there-with a statement of the earnings of other companies engaged in a similar business.

Under a recent ruling by the secretary of state, dealers may offer and provisionally sell all classes of securities before they have been accepted by the secretary as properly qualified, actual delivery of the securities themselves not being made until after qualification.

III. The penalties attached to the Act are severe.

Attempts to sell securities without full compliance with the provisions of the Act are punishable, in case of dealers, with fines as high as \$10,000 or one year's imprisonment, or both; and for sale of securities in case the issuer is known to be insolvent, when the purchaser loses by such sale, \$10,000 or five years, or both. In addition, dealers who sell in violation of any provision are liable for the full purchase price to the purchaser, plus reasonable attorney's fees; and for misrepresentation of the facts contained in the filed statement, "to a maximum fine of \$5,000 or one year's imprisonment, or both."*

Defects and merits of the laws—We have quoted at length from Mr. Moulton's summary of the Illinois Blue-Sky Law, for this summary brings out some of the most outstanding features of blue-sky legislation. As may be judged from the illustrations given, some of the chief defects of such laws are:

1. The laws seem to bear more heavily upon the dealer in legitimate securities than upon the dealer who sells in violation of the law. The laws should regulate the matter of securities before they are issued as well as after they are issued.
2. The blue-sky laws do not apply uniformly, since they are legislated by the various states. Consequently, it is possible to issue the securities in one state and place

*H. G. Moulton, "The Financial Organization of Society."

them on sale in another state. Because of this, the inhabitants of a state which has a more or less effective law may be preyed upon by unscrupulous dealers from other states. This results in unfairness to the security dealers of that particular state.

3. A great many of the fraudulent practices in connection with the sale of securities are consummated through the mails. The Federal Government is able to reach this evil to some extent. The blue-sky laws fail in preventing such practices.
4. Some blue-sky laws tend to hamper the activities of legitimate enterprises and to compel them either to abandon their undertakings or to locate where such legislation is less oppressive.

On the other hand, what do the laws accomplish?

1. The states have come to realize the evils in regard to the indiscriminate selling of securities, and have at least made a move in the right direction, but the laws do eliminate a great deal of fraud in selling securities.
2. The laws are instrumental in initiating a campaign of education which will do much toward developing in the public the habit of making careful investigation.

Administration of blue-sky laws—It must not be assumed, however, that the mere passage of blue-sky laws will accomplish the purpose intended. Laws are of no value unless properly administered.

At the outset, difficulties of two sorts were encountered in the administration of blue-sky laws. Democracies are fairly prompt in sensing weaknesses which apparently merit legislative attention. But upon passage of a law to overcome such weakness, we have a habit of sitting back with folded arms and congratulating ourselves upon our success in effecting the correction. Some years later we may awake to a realization that the law is not being observed because no one has assumed responsibility for its administration. This happened with some of our blue-sky

laws. When administration was finally undertaken, it started with a vengeance and at times hampered even legitimate security sales with its red tape and numerous rules. A variety of practices among the different states also hampered legitimate operations of security salesmen. The organization of the National Association of Security Commissioners has helped to correct the latter by interchange of experiences and opinions.*

181. Antifraud laws

In four of the five states (including New York) that have no so-called regulatory laws and no blue-sky commissions, there have been enacted "Fraud Acts" or antifraud laws. These are designed to aid in the apprehension and punishment of dealers, brokers, promoters, etc., who sell fraudulent securities or sell any securities by fraudulent means. Laws of this type are fundamentally different from the regulatory acts. They are punitive in nature; while regulatory acts, on the other hand, are preventive.

The regulatory law requires the issuer to first satisfy the securities commission that there is no fraud or unfairness present in a security before it is offered to the investor; security salesmen and dealers and brokers are licensed and closely supervised. The purpose is to prevent fraud. On the other hand, the purpose of a Fraud Act is to punish the guilty parties after fraudulent securities have been sold to the public; no supervision of dealers, brokers, and salesmen is attempted; such a law "locks the barn door after the horse is stolen."

New York State has perhaps the "longest, most elaborate, and most drastic" Fraud Act in the country. There is considerable opinion to the effect that it is less effective than regulatory laws in other states. Mr. Watson Washburn, who for a time was directly responsible for the

*Henry E. Hoagland, "Corporate Finance," pp. 424-425.

administration of the Fraud Act in New York, expresses himself as follows in his "High and Low Financiers":

Selling securities probably is the most important industry in New York today, and no business offers a greater opportunity for fraud, yet there is no general supervision, only the necessarily rather haphazard action of the Attorney-General under the Fraud Act, where specific instances of fraud come to his attention. As a result, men with prison records come there to operate. They change their names and addresses overnight, trump up a fancy story, place a gold seal on any kind of printed paper and sell it. They keep the office of the Attorney-General more than busy. Though many cases are prosecuted, there are undoubtedly numerous other operators who should be, but who never come to the notice of the proper authorities.

The mere fact that an ex-convict with a record could establish a bucket shop and handle hundreds of accounts without supervision is a strong argument for the proper licensing or registration of stockbrokers and salesmen.

On the other side of the question it should be noted, however, that under regulatory acts there are often costly delays resulting from the investigations by blue-sky commissions. Under fraud acts these are avoided, and for that reason investment bankers are usually favorable to this type of legislation.

182. Federal regulation of securities*

Until recently, Federal regulation of securities (blue-sky legislation) has been very limited. Some protection has long been offered in the case of interstate security sales under Federal antifraud legislation which provides penalties for using the mails for fraudulent purposes. Jurisdiction over the sale of railroad securities is exercised by the Interstate Commerce Commission. But

*Some of the material in this section has been taken from an unpublished manuscript by Carl H. Hendrikson, Associate Professor of Finance, University of Chicago

not until the years 1933-1934 did the Federal Government provide for a rigid supervision of all interstate dealings in securities. In the preceding period there had been several gigantic swindles and a stock market crash that wiped out thousands of investors and operators, large and small; there was, therefore, an insistent appeal for Federal control of securities distribution and the stock market. Federal legislation during this period has had such a tremendous effect upon large scale financing that it deserves much more complete treatment than is possible within the scope of this book.

Four legislative acts under the "New Deal" have affected directly distribution and marketing of securities.

1. The Banking Act of 1933—the so-called Glass-Steagal Bill
2. The Securities Act of 1933
3. The National Securities Exchange Act of 1934—also known as the Fletcher-Rayburn Bill
4. The Investment Bankers' Code of Fair Competition, which, while not specific legislation, has the effect and force of law

Of these, the National Securities Exchange Act has already been discussed in Section 158.

183. The Banking Act of 1933

Section 21 of the Act provides, among other things, for the divorcing of security affiliates from banks. As a result of the Banking Act of 1933, some of the oldest and best known investment banking firms in the country have ceased to distribute stocks and bonds—among them J. P. Morgan and Company and the N. W. Harris Company.

For detailed discussion of the Banking Act of 1933, see volume on Business Economics

Minor provisions of the Act are that brokers and dealers may not accept deposits subject to check or to repayment unless they are willing to submit to periodic examination by the Comptroller of Currency or by the Federal Reserve Bank of the district, and fulfill certain other requirements commonly demanded of banks.

184. Securities Act of 1933

This law is described as "An Act to provide full and fair disclosure of the character of securities sold in interstate and foreign commerce and through the mails, and to prevent frauds in the sale thereof, and for other purposes." Its administration is in the hands of the Stock Exchange Regulatory Commission described on preceding pages.

It aims definitely to shut the door for all time upon those financial methods of the past that brought disaster to thousands of investors and, to a great extent, destroyed the broad base of public confidence upon which our economic structure depends.

The outstanding purpose of the Securities Act is that full disclosure shall be made of all material facts concerning an issue of securities that is offered for sale to the public. It is based upon the principle that an investor whose savings are solicited for the uses and purposes of a corporation is entitled to be told the truth, the whole truth, and nothing but the truth.

To accomplish this purpose, the Act provides that an issuer of securities shall, before offering them for sale to the public, make disclosure of all the material and significant facts concerning them. Twenty days before the issue is to be offered for sale, the issuer must file with the commission a registration statement containing all the material facts in regard to the issue, such as are necessary

to even an elementary judgment upon the value of the security, and a copy of the prospectus by which the issuer proposes to lay these facts before the public.

But neither the commission nor the Attorney-General is empowered by the law to pass upon the quality or the investment value of any security. Neither the issuer's right to offer nor the public's right to buy a security may be limited under this Act on account of its speculative, unsound, or hazardous character. The Securities Act differs in concept and in plan from the so-called "blue-sky" laws of many of the states, which have been described on preceding pages. While certain of the state commissions pass upon the quality of a security to determine whether or not it may be offered for sale within their jurisdiction, the Federal Act adheres to the principle that investors shall be told the truth, and all of it, concerning securities publicly offered for sale.

Obviously, then, it is the intention of the law that the corrective power with respect to unsound financial and investment practices be placed largely in the hands of the investing public. The lack of power in the commission to supervise or control the decisions of investors is supplemented by a grant of relief to investors by suit for recovery of money paid for a security falsely or inadequately described in the statements made concerning it.

This liability is imposed by the Act upon the issuer or issuing company, upon its directors, principal officers, and underwriters, and upon such experts as are quoted, with their consent, in the statements made by the issuer. They are held responsible, however, only for the use of reasonable diligence, such as is required of any fiduciary who undertakes to manage the property of others in their behalf. Any of them except the issuer itself may

escape this liability, if they can prove that they exercised such diligence in determining the accuracy of their statements to the investor.

Broad powers are given to the commission to prescribe the form and, in large part, the content of the facts that shall be stated in the registration and prospectuses. The most important requirements in respect to registration statements and prospectuses are statements of the purposes to which the money raised by the new issue is to be put, and statements showing the financial condition of the company at or shortly before the date of issue, and its operations during the last three years. In connection with the purposes of new financing, the forms prescribed by the commission require adequate descriptions of the property to be acquired, how much is to be paid for it and to whom, and complete revelation of any interest in such property owned by promoters, officers, or directors of the issuing company.

In the matter of financial statements, the commission is given authority to prescribe not only the forms in which statements shall be rendered, but also by what terms the various items of assets, liabilities, profit, and loss shall be designated. This feature of the Act will undoubtedly contribute in large measure to the furnishing of more uniform and more informative financial reports to the investing public.

The Securities Act is not predicated, as I view it, upon the theory that the interests of investors are in conflict with the interests of the issuers. On the contrary, it embodies the most practical recognition ever put into the Federal law of the fact that the investor and the corporation are mutually dependent. Neither can continue to prosper at the expense of the other, nor can either fail in the sharing of responsibilities without bringing

failure to both. A law which is founded upon this view and which seeks to give a new and practical meaning to the interdependence of these two interests, assuredly is a law that will work to the benefit of those corporations which, by telling their story to the public, can prove that they merit public confidence. Directly it will benefit them through helping to restore the confidence to their investors; indirectly also it will help them by making the distinction more clear between those concerns that do and those that do not deserve the continued support of the investing public.

If, out of the opportunity that this law creates, we cannot restore the public credit of private corporations; and if, out of the standards that this law makes mandatory, we cannot make progress toward a more enduring financial and economic structure, then indeed we have learned nothing from the tragic mistakes of the recent past. But I will not accept that outlook. I am not ready to believe that the letters which the commission receives daily from persons who invested and lost all they had saved, are letters that must be written over and over again indefinitely into the future. Restitution of their losses cannot be made to them; but that they and those who follow them shall not again be betrayed by the false promises, the glittering half truths and all the paraphernalia of arrogant financial practices is the purpose for which the Securities Act was written. It will be administered to that end.*

The law is not intended to supersede the state security laws. Intrastate transactions are still under the jurisdiction of state securities commissions. The Act does not provide for the registration of brokers, dealers, and solicitors. This has been left to the states. It is possible that the Federal Government could take over this function and thereby decrease the total social cost of security supervision by eliminating a large amount of duplication.

The Securities Act introduces a new philosophy into American law—that of placing the burden of proof of

*Garland S. Ferguson, "The Securities Act of 1933," an address over NBC. September 12, 1933

good faith on the defendant; this is not uncommon to English practice. In other words, it has been traditional in this country that a man is innocent until proven guilty; but under this Act, the defendant must sustain the burden of proof that he did not know, and in the exercise of reasonable care could not have known, of such untruth or omission used as a basis of suit.

The Act gives to the prudent and analytically-minded investor a course of essential information—if he can afford to pay for it. The registration form, which is an outline of the information required by the Federal Trade Commission of all applicants, covers 30 pages or more. A registration statement of a fairly large-sized corporation would require at least 100 pages to give the essential information that the form dictates. The application of the American Water Works Company contained over 1,700 pages. Anyone may obtain from the Securities Division of the Federal Trade Commission copies of registration statements of any registered corporation at the following prices: 20 cents per page for photostat copies; 15 cents per page for mimeograph copies. The probable cost to an investor to obtain the information on a fairly large corporation would be at least \$20. Information on the American Water Works Company would cost approximately \$340.

The prospectus contains part of the information included in the registration statement—what part depends on the orders of the commission. On the first page of the prospectus is usually found a statement similar to the one below:

This prospectus is in the form on file with the Federal Trade Commission in compliance with the requirements of the Securities Act of 1933. Together with the documents and reports

referred to therein, it contains the only statements with respect to this issue of stock which any one acting for the Issuer or the Underwriter is authorized to make; and no one is entitled to rely upon any other or further representations.

Copies of the registration statement on file with the Federal Trade Commission may be procured from the Commission upon payment of the legal charge therefor. Neither the fact that such registration statement has been filed with the Commission, nor the issuance of this Prospectus under the rules or regulations prescribed, shall be deemed a finding by the Commission that this prospectus is true and accurate on its face, or does not omit to state a material fact or to mean that the commission has in any way passed upon the merits of, or given approval to, such prospectus or the security mentioned therein.

Once the information is received by the prospective investor, he still has the task of analyzing and evaluating the securities, or he must pay an expert to make an analysis for him. As a matter of fact, the small investor who actually desires all the material information on a corporation before making his investment is an extremely rare individual. What the small investor wants and expects is an honest appraisal and a stamp of approval by officials of the government. That this can rarely be done satisfactorily is shown by experience under the blue-sky laws of the various states.

185. The Investment Bankers' Code of Fair Competition

Only some of the most interesting provisions of this code can be mentioned here.

Before originating any issue over \$100,000, the investment bankers will require agreements from the issuer that he will provide annually independently audited statements to each security holder.

In making retail sales, all commissions must be itemized and the purchaser must be informed whether the

dealer is acting as principal or agent. No guarantees may be made as to market value. No partial payment transactions may be made, unless the investment banker actually controls the security sold. No sales may be solicited on the basis of purchases of others. That is, a salesman may not mention the fact that Mr. "A," a well-known person, is a stockholder. All salesmen's orders must be endorsed by an official of the firm.

No salesman may call a prospective customer on the telephone or call in person at the residence unless the prospect has given written permission to the firm; except that "This section shall not apply to the solicitation of business persons, retired or professional persons, or farmers."

Additional information required—When a corporation issues additional securities, it must comply with the state and Federal laws, and must provide that the conditions under which the new securities are issued shall not conflict with the provisions of any previous issue. There must not be anything in connection with the issue which is in conflict with the charter or by-laws, and the securities must be properly authorized and issued. Usually attorneys are employed to examine all legal phases of the issue. The advertising literature usually states that all legal questions have been passed upon by some well-known firm of attorneys.

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